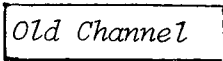


Pahang Channel



Western Channel

Eastern Channel

Old Channel

MAP 1

LANDFALL ON THE PALEMBANG COAST IN MEDIEVAL TIMES

O. W. Wolters

The Palembang Coast during the Fourteenth and Fifteenth Centuries

I had always supposed that the metropolitan centers of Śrīvijaya, though probably dispersed according to their royal, social, commercial, or food-supplying functions, were in the neighborhood of modern Palembang city. I was among those influenced by the presence there of seventh century inscriptions, and I also assumed that the area where Bukit Seguntang stood had long ago possessed religious prestige among Malays and contributed to the fame of the Palembang area. I did not believe that the capital of Śrīvijaya had always been in the Palembang area. Palembang enjoyed this status from the seventh century until the second half of the eleventh, when the Malay overlord's center was moved to the Jambi area where it remained until turbulent events in the second half of the fourteenth century set in train the foundation of the Malay maritime empire of Malacca by a Palembang prince. After the shift in political hegemony from Palembang to Jambi, perhaps only officials in the Chinese court anachronistically continued to use the expression "San-fo-ch'i" ("Śrīvijaya") to identify the prominent political center on the southeastern coast of Sumatra. Nevertheless, even after the eleventh century Palembang continued to be an important emporium. By the twelfth century no Malay port depended for its fortunes on the Chinese tributary trade. Chinese merchants were themselves in increasing numbers visiting centers of production or regional entrepôts in many parts of the archipelago.¹

The preliminary report of the Palembang archaeological expedition of 1974 has startlingly challenged my suppositions. According to the report,

the entire area does not contain enough pre-14th Century artifacts to make one small village. Thus we feel forced to conclude that Srivijaya during the early phases of its existence was not in or near Palembang and probably not anywhere else in South Sumatra Province, the drainage area of the Musi.²

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1. This understanding of the outline of Śrīvijayan history is reflected in my The Fall of Śrīvijaya in Malay History (Ithaca: Cornell University Press, 1970).
 2. I am greatly indebted to Dr. Bennet Bronson for enabling me to read the preliminary report on research undertaken in southern Sumatra in 1974 by the Lembaga Purbakala dan Peninggalan Nasional and the University of Pennsylvania Museum. I shall refer to the report as: Archaeological Research in Sumatra 1974. The excerpt quoted above is on page 14. Two short accounts of the excavations have already been published: Bennet Bronson, "A Lost Kingdom Mislaid: A Short Report on the Search for Srivijaya," Field Museum of Natural History Bulletin, XLVI, 4 (1975), pp. 16-20; Jan Wisseman, "Archaeology in Sumatra--1974," Indonesia Circle, 6 (March 1975), pp. 6-8.

The earliest site that the expedition discovered was Penyaringan Air Bersih, lying to the east of the modern city of Palembang and a little distance inland from the northern shore of the Musi river. Here, as the archaeologists have revealed,

even the sherds from the deepest strata in the test pits were very similar to those found on the surface, and these were virtually all of 14th-15th Century provenience. The surface collections, though not the test pits, did produce small quantities of ceramics from the late Sung or Yuan Dynasties, the 13th and perhaps 12th centuries. But these were so few as to give rise to the suspicion that they had still been in use during the 14th and 15th Centuries, perhaps because they were heirlooms or perhaps because the chronology of their production in China is not yet fully understood.³

These findings make it certain that the Air Bersih settlement cannot be regarded as very ancient. The period of its occupation is confidently defined as falling within the limits of the fourteenth and fifteenth centuries.

Two features of the expedition's findings are particularly noteworthy. There seems to have been uninterrupted settlement at Air Bersih during the fourteenth and fifteenth centuries. Secondly, the settlement is likely to have been superseded by, rather than transferred to, a later settlement, represented by the Geding Suro area, which is a kilometer to the southeast of Air Bersih.

The Geding Suro artifacts and architectural remains are chiefly of the sixteenth and seventeenth centuries,⁴ and the report describes this area as "an almost classic example of a one-period site. It was first inhabited about 1500 AD, grew to urban dimensions very quickly, and was largely abandoned by 1650-1700."⁵ Especially interesting are the report's comments on the differences between artifacts of local manufacture in Air Bersih and Geding Suro.

Indeed, while the imported ceramics show a roughly ten percent carry-over of types between the Air Bersih and Geding Suro Phases, the local ceramic types show an almost clean break. Overall vessel shapes remained fairly constant, but pastes and decorative treatments seem to have changed extensively between the time that occupation drew to a close at Air Bersih and the time it resumed at Geding Suro. What caused this change is not at all clear. But it undoubtedly is a reflection of an extensive change in other aspects of the ancient society. The people who moved into Geding Suro may not have been exactly the same people, or had the same socio-economic setup, as the people who moved out of Air Bersih a few years earlier.⁶

Thus the Air Bersih settlement represents a distinct phase in urban time, with a chronology attributable only to the fourteenth and fifteenth centuries. Geding Suro cannot be regarded as an extension of the culture of Air Bersih.

The results of the 1974 expedition are probably the most fruitful contribution to the study of early Palembang history since Coedès in 1918 restored the meaning of the term "Śrīvijaya." The excavations

3. Archaeological Research in Sumatra 1974, p. 7.

4. Ibid., p. 6.

5. Ibid., p. 7.

6. Ibid., pp. 7-8.

have certainly raised questions that would otherwise never have occurred to me. In my response to this new and exciting phase in Palembang studies, I shall begin by discussing textual material that seems to explain the strange circumstance that different peoples lived at Air Bersih and Geding Suro. The identity of the inhabitants of the two settlements can be profitably examined because we are not dealing with a span of time that is prehistoric or even protohistoric. Literary sources are available for trying to elucidate the significance of the new archaeological evidence, and I shall try to interpret this evidence by means of texts and vice versa. The former type of evidence is supported by specific topography and a confidently asserted chronology, while the texts contain precisely dated information about what Chinese travelers actually saw.

I shall continue the discussion by explaining why I doubt the archaeologists' conclusion that Air Bersih is the earliest settlement in the Palembang area. The reasons why I demur are also contained in Chinese texts that describe landfall situations in the Palembang area during the fourteenth and fifteenth centuries. I shall then cautiously suggest the zone where I believe that a search should be made for an earlier settlement than Air Bersih. Finally, I shall glance even more cautiously at two itineraries, of the eleventh and eighth centuries respectively, whose contents, if they could be accurately reconstructed, would establish the location of Śrīvijaya in those two centuries.

The first question concerns the identification of the inhabitants of Air Bersih, the earlier of the two settlements found in 1974, and this question requires a discussion of three toponyms mentioned in Chinese texts: San-fo-ch'i, Palembang, and "Old Kang." A relationship between them is asserted in the *Ying-yai shêng-lan*, written by Ma Huan, who accompanied the Chinese admiral Chêng Ho on three expeditions to Southeast Asia and the Indian Ocean in the first decades of the fifteenth century.⁷ Ma Huan states:

Old Haven (Old *Kang*) is exactly the same country as that formerly called *San-fo-ch'i*, [and] the foreigners call it by the name *P'o-lin-pang*.⁸

San-fo-ch'i is the name used in Sung sources from the second half of the tenth century to designate Śrīvijaya. The origins of the transcription have never been definitively explained, but we shall see that San-fo-ch'i was known by the early Ming court to be somewhere on the southeastern coast of Sumatra. The Chinese began to use the transcription as the name of an active tributary kingdom in the second half of the tenth century. Not many decades later the name "Śrīvijaya" was still recognized by the Cōḷa dynasty in Tamil-nad.⁹ The original iden-

7. Forewords were written for this work in 1416 and 1444, and the first edition was in 1451. Ma Huan was overseas in 1413-15, 1421-22, and 1431-33. For information about him, see the fine study by J. V. G. Mills (translator, editor, and annotator), *Ma Huan: Ying-yai Shêng-lan* (Cambridge: Cambridge University Press, for the Hakluyt Society, 1970).

8. Mills (ed.), *Ma Huan*, p. 98.

9. George Coedès, *The Indianised States of Southeast Asia* (Honolulu: East-West Center Press, 1968), trans. Susan B. Cowing, ed. Walter F. Vella, p. 142. In 1017, the ruler of San-fo-ch'i announced himself to the Sung emperor as "the king of the ocean lands"; Paul Pelliot, *Notes on Marco Polo*, (3 vols.; Paris: Imprimerie Nationale, 1959-73), II, p. 839.

tity of San-fo-ch'i and Śrīvijaya need not be disputed. Although we shall enquire why Ma Huan said that Old Kang, identified by him with Palembang, was once called San-fo-ch'i, his statement will not be invoked to support the proposition that Śrīvijaya was located at Palembang. But, in the context of the Air Bersih evidence, the relationship between the expression "Old Kang" and Palembang in the early fifteenth century needs to be clarified.

Both toponyms were current in the fourteenth century. Chao Ju-kua had already included Pa-lin-p'ing among the dependencies of San-fo-ch'i in the early thirteenth century.¹⁰ In 1309, a Mongol mission was sent to Pu-lien-pa, a toponym identified by Pelliot with Palembang.¹¹ And in 1374 a mission was sent to the Ming court by the Mahārāja of Paulin-pang.¹² "Palembang" is evidently the name by which Malays knew the region, and this is why Ma Huan tells us that "the foreigners," by whom he means the indigenous population, call it P'o-lin-pang.

The third toponym, mentioned by Ma Huan, is Old Kang, and the first known reference to it is by Wang Ta-yüan in his *Tao-i chih-lüeh*, written in 1349-50.¹³ The name is found only in Chinese texts. Wang Ta-yüan was in the Indian Ocean in 1330, and we can suppose that it was about this time that he became familiar with the name.¹⁴ I shall consider the correct meaning of this term in a moment, when I shall suggest that it has a geographical significance in the sense of being a waterway in the Palembang area and not, as Ma Huan supposed, the name of a country and the equivalent of Palembang. We shall see that the early Ming court erroneously believed that Old Kang represented the territories of the former San-fo-ch'i after the latter's sack by the Javanese in 1377. Ma Huan was an official in the service of the Ming, and he therefore subscribed to the court's assumption that Old Kang was a territorial designation and used the term to refer to a settlement on the Palembang coast.

Old Kang is mentioned several times in Ming records referring to the late fourteenth and early fifteenth centuries, and the evidence in these records has a bearing on the identity of the inhabitants of Air Bersih.

Ma Huan mentions Chinese from Kuangtung, Chang-chou, and Ch'üan-chou who fled to Old Kang and also Cantonese who did likewise in the 1368-1398 reign period of the first Ming emperor, T'ai-tsu. The

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10. F. Hirth and W. W. Rockhill (translators and annotators), *Chao Ju-kua* (St. Petersburg: Imperial Academy of Sciences, 1911), p. 62. I have altered the transcription of the final syllable to read "p'ing," an alternative and more appropriate pronunciation.
 11. Yüan-shih (Po-na edition; Shanghai: Commercial Press, 1935), ch. 23, 10a; P. Pelliot, *Mémoires sur les coütumes du Cambodge de Tcheou Ta-kouen* (Paris: Librairie d'Amérique et d'Orient, 1954), p. 121, note 1.
 12. *Ming shih-lu* (Nankang: Hung-kê text of the National Library of Peking, edited by the Institute of History and Philology, Academia Sinica, Taipei, 1962-), ch. 93, 4b-5a.
 13. Wang Ta-yüan, *Tao-i chih-lüeh chiao-chu* (Peiping: Wen tien ko shu chuan, Kuo-hsüeh wen k'u 26, 1936), pp. 84-85; W. W. Rockhill, "Notes on the Relations and Trade of China with the Eastern Archipelago and the Coast of the Indian Ocean During the Fourteenth Century, Part II," *T'oung Pao*, XVI (1915), p. 135.
 14. Rockhill, "Notes on the Relations," p. 62, note 1.

Cantonese became pirates under the leadership of Ch'ên Tsu-i.¹⁵ The *Shu-yü chou-tzū lu*, written in 1574, describes how, towards the end of the fourteenth century, several thousand Chinese elected Liang Tao-ming as their leader in Old Kang.¹⁶ The election seems to have taken place not long after a Javanese attack on Palembang. The background to the attack was the decision of the Malay ruler of Palembang, soon after Hayam Wuruk's death in 1389, to repudiate Javanese suzerainty; the Javanese retaliated by sacking the Malay capital. Memories of the ruler's flight survive in Tomé Pires' *Suma Oriental*.¹⁷

The Javanese attack created a political vacuum, and the Chinese traders responded by establishing their own local government under a Chinese headman. Thereafter they were protected by the vigorous naval policy of the Yung-lo emperor, reigning in China from 1403 to 1424. An imperial guard commander, Sun Hsüan, visited them, met Liang Tao-ming's son, and took him back to China. As a result, Liang Tao-ming was recognized by the Ming emperor as the lawful leader of the Chinese in the Palembang area. In 1407, the emperor created the Old Kang Pacification Office and appointed the headman to administer it.¹⁸ In the same year the Palembang Chinese sought the aid of Chêng Ho's fleet in suppressing Ch'ên Tsu-i's pirate gang. The last recorded mission to China was sent in 1424.¹⁹ Little is known of the subsequent history of the local Chinese regime. The Ming fleet visited Old Kang in July 1432, two communications were sent from Old Kang to the Ryu-kyu islands in 1431, and three voyages were undertaken from the islands to Old Kang in the 1428-39 period.²⁰

The date and circumstances of the end of Chinese rule at Palembang have not been established. Tomé Pires, writing in the early sixteenth century, states that:

the land of Palembang used to have heathen kings of its own and it was subject to the *cafre* king of Java, and after the Moorish *pates* of Java had made themselves masters of the sea coasts, they made war on Palembang for a long time and took the land, and it had no more kings, only *pates*, and Palembang has ten or twelve chief *pates*. Palembang has about ten thousand [men ?] many of whom lost their lives in the Malacca war against us.²¹

Pires packs more than a century of history into this passage. His mention of the "cafre king of Java" refers to the period of Majapahit's

15. Mills (ed.), *Ma Huan*, pp. 98-99.

16. Yen Ts'ung-chien, *Shu-yü chou-tzū lu* (Peiping: Ku-kung, po-wu yüan t'u-shu kuan, 1930), ch. 8, 17b.

17. Wolters, *Fall of Śrīvijaya*, pp. 71-74.

18. *Ibid.*, pp. 71-74, 117-18. For the title "Pacification Office," see Charles O. Hucker, "An Index of Terms and Titles in 'Government Organisation of the Ming Dynasty,'" in John L. Bishop (ed.), *Studies of Governmental Institutions in Chinese History* (Cambridge: Harvard University Press, 1968), p. 135.

19. *Ming-shih* (Po-na edition; Shanghai: Commercial Press, 1936), ch. 324, 27a.

20. Shunzo Sakamaki, "Ryu-kyu and South East Asia," *Journal of Asian Studies*, XXIII, 3 (1964), pp. 384, note 2.

21. A. Cortesão (translator and editor), *The Suma Oriental: An Account of the East, from the Red Sea to Japan, Written in Malacca and India in 1512-1515* (2 vols.; 2nd ed.; London: Hakluyt Society, 1944), I, p. 155.

power in the fourteenth century, and he describes the earlier Javanese attack elsewhere in his work when he tells us what he has heard of the founder of Malacca, the Malay refugee from Palembang.²² But in the other sentences in the passage quoted above Pires is drawing on local information about a more recent situation, when the fortunes of Palembang were connected with the rise of Moslem trading states on the north coast of Java. What was happening in Palembang in the later fifteenth century is still far from clear, though during the sixteenth century ties of friendship existed between the princes of Palembang and Demak. Various Palembang traditions refer to the coming of a Javanese prince from Surabaya at about the middle of the sixteenth century. He is called *ki gedeng Sura*,²³ a name which is probably the origin of the *Geding Suro* toponym. The Javanese prince's arrival is also the probable background to the establishment of this settlement area to the east of modern Palembang, though more needs to be known of the Demak connection with Palembang earlier in the sixteenth century before the origins of *Geding Suro* can be more exactly defined.

We can now return to the artifacts in the Air Bersih area and suggest their meaning. The literary sources show that the Chinese were flourishing in the Palembang area during the first four decades of the fifteenth century, when, for much of the time, Chêng Ho's fleet was making regular voyages that guaranteed political stability and peaceful trading conditions overseas. The Chinese are the single organized group of consequence known certainly to have been living in or near Palembang at that time. The archaeologists, for their part, have shown that Air Bersih was in existence during these decades, and the inference is that the debris of Chinese settlers can be assumed to come to light from a fifteenth century site, as Air Bersih undoubtedly is. Therefore the following passage in the 1974 report has considerable significance:

Air Bersih seems to have been rather smaller and less impressive than *Geding Suro*, although this need not mean that it lacked political importance in its day. It cannot have had much permanent architecture within the urban area, and the debris produced is not more abundant than might be produced by a modest town. However, it is worth noting that the imported ceramics at Air Bersih are quite variable, coming from several different parts of Southeast Asia and China. This might indicate a level of taste and prosperity somewhat higher than one would expect in a minor center.²⁴

These words read as a fairly convincing description of the remains of a flourishing Chinese trading settlement of the fifteenth century. Rather than assuming that the Air Bersih inhabitants had a high "level of taste," I suggest that they had expert knowledge of the Southeast Asian markets for Chinese porcelain. They had extensive contacts with China and as far away as the *Ryu-kyu* islands. Nearly two-thirds of the imported ceramics that the archaeologists recovered were of Chinese

22. *Ibid.*, II, p. 231.

23. H. J. de Graaf and Th. G. Th. Pigeaud, "De Eerste Moslimse Vorstendommen op Java. Studiën over de Staatkundige Geschiedenis van de 15de en 16de Eeuw," *Verhandelingen van het Koninklijk Instituut voor Taal-, Land-, en Volkenkunde*, LXIX (1974), pp. 202-3.

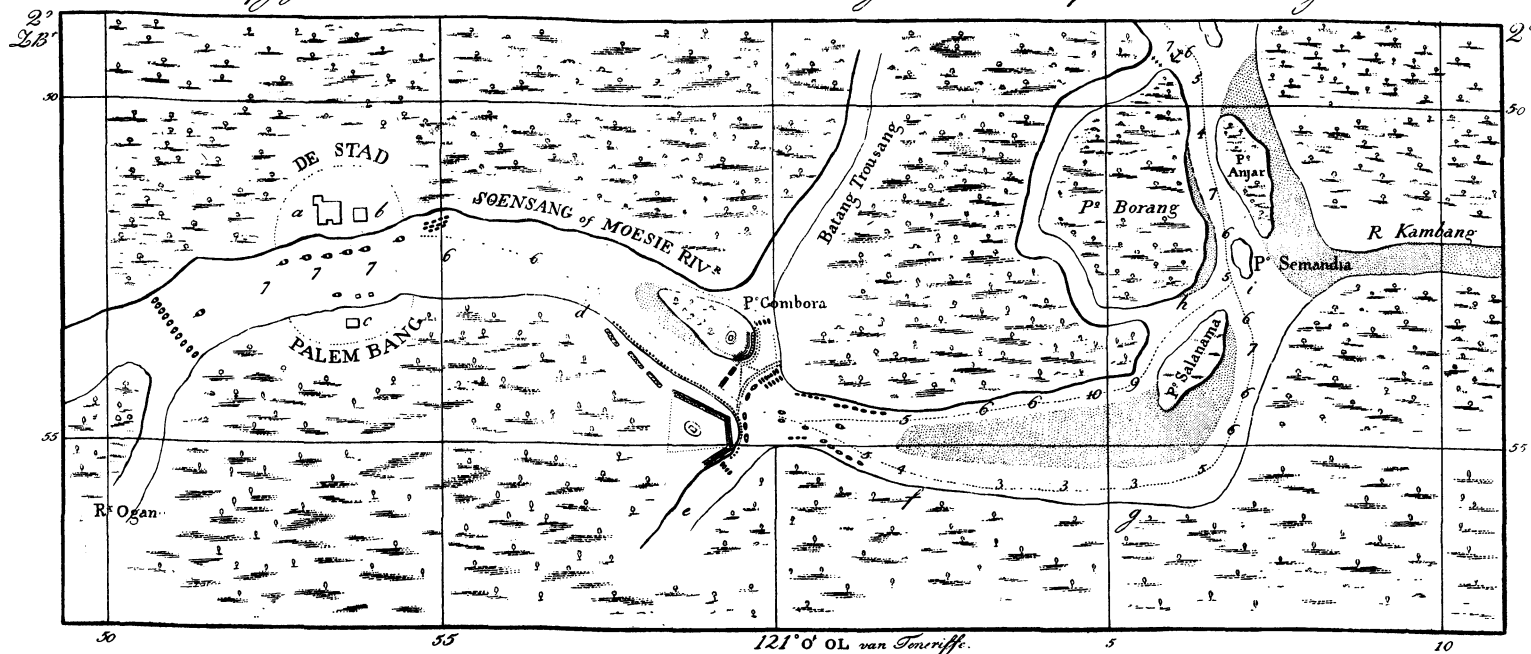
24. *Archaeological Research in Sumatra 1974*, p. 8.

manufacture, and nearly a third came from Vietnam.²⁵ The settlers probably lived in modest wooden buildings; even their headmen's seal was destroyed by fire and had to be replaced in 1425.²⁶ Yet the community enjoyed the means of wealth, and their headman in 1423 was able to assemble an impressive range of tributary gifts for the Chinese emperor.²⁷ The preliminary report on the excavations reveals that "the local ceramic types [of Geding Suro] show an almost clean break [from those of Air Bersih]," and the majority of the "local ceramics" in Air Bersih may in fact be of Chinese manufacture, either as trading imports or already in the settlers' possession when they first arrived at Air Bersih. Wang Ta-yüan notes that earthenware jars were imported in the Palembang area.²⁸

The consistency between the literary and archaeological evidence points to the conclusion that Air Bersih was a Chinese trading station during the early fifteenth century. Because no evidence exists of demographic change at Air Bersih, we can assume that Chinese were also living there in the undocumented period of the settlement's history. No wonder that the archaeologists suspected that "the people who moved into Geding Suro may not have been exactly the same people, or had the same socio-economic setup, as the people who moved out of Air Bersih a few years earlier."²⁹ The inhabitants of Air Bersih probably drifted away to another settlement area when the restoration of Indonesian rule created a new situation for them. They had established their own government as a result of extraordinary circumstances at the end of the fourteenth century, but it was not their intention to defend it in the face of Javanese or Malay opposition. The Air Bersih excavations yield no hint of a violent end to the settlement. Instead, the Chinese would have quietly adapted their trading needs to the new political environment and made a base elsewhere in the area at a discreet distance from the Moslem court of the new rulers of Palembang. I suggest that they crossed to the southern shore of the Musi river near the banks of the Auwer rivulet, where they were later joined by the staff of the Dutch factory in the middle of the seventeenth century.³⁰ They

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25. Bronson, "A Lost Kingdom Misaid," p. 19. I am grateful to Dr. Bronson for sending me further details on the composition of the imported ceramics. Slightly over 30% came from Vietnam, and just under 60% was of Chinese manufacture.
 26. Ming-shih, ch. 324, 27a.
 27. Ch'ên Jên-hsi, Huang-Ming shih-fa lu (Taipeh: Hsüeh-sheng shu-chü, 1965), p. 2162, lists a number of conventional luxury goods from countries in the Indian Ocean. The text was completed in 1630 but drew on earlier documents.
 28. Wang, Tao-i chih-lüeh, p. 85. Wang also states that Old Kang's porcelain imports came from Ch'u-chou prefecture in Chekiang province. He is referring to what is more commonly known today as Lung-ch'uan celadon, with its olive green glaze over a reddish brown body.
 29. Some of the archaeological remains of Geding Suro have long been recognized as having close affinities in style to the late and post-Majapahit architecture of East Java. Archaeological Research in Sumatra 1974, p. 6.
 30. For the site of the first Dutch factory see the frontispiece map of De Heldhaftige Bevreiding van Palembang (Rotterdam: Arbon en Krap, 1822) by an anonymous writer. See Map 2. The factory is marked 'c' and is shown on the southern shore of the Musi between the estuaries of the Ogan and Komering and facing the Sultan's palace on the northern bank. Also see Anon., "Schetsen van Palembang," Tijdschrift voor Neêrland's Indië, VIII, 3 (1846), pp. 327, 355. A nineteenth

NIEUWE KAART DER RIVIER VAN PALEMBANG,
*tusſchen het punt, waar zij den 27 Junij 1821 door tien Kanonneerbooten enz.
 afgeſloten was, en het Noordeinde van het groote Eiland, of Pulo, Borang.*



MAP 2

certainly did not forsake the Palembang area. The *Ming-shih* notes that in 1577 a Cantonese pirate, Chang Lien, reported captured towards the end of that 1522-66 reign period of China, had been identified by traders as living in Old Kang, the name by which the Chinese eventually came to know the Palembang area in the sense of a residential location.³¹ Chang Lien controlled a large commercial enterprise, had many Hokkien followers, and was behaving like a trade superintendent in China.³²

If the identification of the Air Bersih inhabitants as Chinese is correct, the 1974 expedition has supplied the first topographical clarification of the settlement history of the Palembang region. Later research will be able to proceed on the basis of this indispensable foundation.

century map of Palembang shows several Chinese sites on the southern bank of the river; J. W. Stemfoort and J. J. ten Siethoff, *Atlas der Nederlandsche Bezittingen in Oost-Indië* (The Hague: Topographische Inrichting, 1883-85), p. 8. Excavations here would complement those undertaken at Geding Suro.

31. For a reference to Old Kang in the eighteenth century, see Claudine Lombard-Salmon, "Un Chinois à Java (1729-1736)," *Bulletin de l'École Française d'Extrême-Orient* (BEFEO), LIX (1972), p. 289. The name was still being used in Groeneveldt's day; W. P. Groeneveldt, *Notes on the Malay Archipelago and Malacca. Compiled from Chinese Sources* (Batavia: Bruining, 1880), p. 71, note 1. The contemporary Chinese name is Chū Kang and not Chiu ('old') Kang; Hsiang Ta, *Liang chung hai tao chên ching* (Peking: Chung-hua shu-chū, 1961), note on page 43.

32. *Ming-shih*, ch. 324, 27a.

But the proposed identification of the Air Bersih settlement throws no light on another question. Is this the first trading settlement in the region? The archaeologists are convinced that Air Bersih's origins can be no earlier than the fourteenth century, but it would be surprising if the fourteenth century Malay rulers of Palembang were the first port-controlling rulers in the history of the Palembang region.³³ Moreover, Wang Ta-yüan, describing the situation about 1330, refers to Old Kang as an important trading center, for, when he wants to emphasize the riches of the people of Bengal, he states that they surpass those of Old Kang and of Java.³⁴ If he is referring to the Air Bersih settlers, the settlement achieved commercial importance in a remarkably rapid period of time. We are bound, therefore to enquire whether the Old Kang known to Wang was the same place as the Old Kang known to the officials of the Yung-lo emperor (1403-24).

This question involves an examination of the meaning and geographical implications of the term *kang*. I have, to my regret, habitually rendered it as "harbor" and have written of the "Old Harbor."³⁵ Mills translates the name as "Old Haven,"³⁶ and Groeneveldt in 1876 translated it as "Old River."³⁷ Pelliot in 1904 observed that the literal meaning was "Old Estuary" but in the sense of "Old Port,"³⁸ though he subsequently adopted the translation "Old Channel."³⁹

The questions raised by the Air Bersih discoveries require that the meaning of the term *kang* should be rendered as accurately as possible, and, for this purpose, I shall first discuss its usage in the context of the earliest reference to it, which is in Wang Ta-yüan's itinerary. According to him:

Old Kang. One enters the Bangka Strait from [a] fresh-water kang. The people use bamboo instead of ships. The route has many brick stūpa.⁴⁰

The reference to the Bangka Strait shows that he is referring to the Palembang area, but his text does not make it immediately clear whether he is giving an account of the way to or from Old Kang.⁴¹ He may never have visited this place. If he had done so, he would hardly have written so ambiguously. More likely, he met merchants, probably Chinese, during his travels overseas and was impressed by the way in which they were prospering. He would have cross-examined them and been told of fertile fields in the neighborhood of Old Kang and of the exports

33. For example, the ruler who received the Mongol mission in 1309 or sent a mission to China in 1374. And why does Chao Ju-kua refer to a "Palembang" in the early thirteenth century?

34. Wang, Tao-i chi-lüeh, p. 147.

35. Wolters, Fall of Śrīvijaya, p. 3.

36. Mills (ed.), Ma Huan, p. 98.

37. Groeneveldt, Notes on the Malay Archipelago, p. 71, note 1.

38. Pelliot, "Deux Itinéraires de Chine en Inde à la Fin du VIII^e Siècle," BEFEO, IV, 1-2 (1904), p. 346 and note 5.

39. Pelliot, "Les Grands Voyages Maritimes Chinois au Début du XV^e Siècle," T'oung Pao, XXX (1933), p. 376.

40. Wang, Tao-i chih-lüeh, p. 84; Rockhill, "Notes on the Relations," pp. 135-36.

41. See Mills (ed.), Ma Huan, p. 98, note 7, for an account of the confusion caused by this passage.

and imports of the area.⁴² The merchants would also have explained the geography of the area. But does the passage quoted above provide the route to or from Old Kang? Pelliot believed that Wang was referring to a journey from Old Kang that involved traveling on a freshwater channel.⁴³ In support of his interpretation, we can note that Wang refers to no other toponym associated with Sumatra or indeed Java as having a "freshwater channel," even though it was by no means rare for the Chinese to recognize such a geographical feature in Southeast Asia.⁴⁴ Wang mentions two other freshwater channels besides the one we are considering.⁴⁵

If Wang had been describing the route to Old Kang from a freshwater channel elsewhere in Southeast Asia, he would surely have included the word "reach" (*chih*) in his text. This is the word he uses to terminate accounts of routes to other places. Instead, the Old Kang route ends with "entering" the Bangka Strait. If the ships were reaching Old Kang from another port, the itinerary would end inexplicably in the Bangka Strait. Rather than interpreting Wang's text in this way, we should conclude that he had been told that one sailed from Old Kang by means of a freshwater channel that led to the Bangka Strait.

The next detail to be explained in order to clarify the meaning of the term Old Kang is the significance of the expression "freshwater channel." The expression means no more than that Chinese traders noted that the waterway's salt content was diluted by fresh water. A clear example of the usage is provided by Wang's description of an estuary on the northeastern coast of Sumatra that was known as the extension of a long river in the interior.⁴⁶ The water in the estuary remained fresh until it reached the sea where it could still be drunk. Wang therefore knew this part of the Sumatran coast as the "Freshwater Sea."

Wang is evidently referring to a navigational fairway from an unnamed port in the Palembang region to the Bangka Strait. The fairway is described as a freshwater channel, and this means that its contents were no longer entirely saline and that it probably resembled a wide river rather than a broad arm of the sea. What, then, is the relationship between the fairway and Old Kang?

Several considerations, outlined below, have convinced me that "Old Channel," Pelliot's translation in 1933, is the correct translation of the expression Old Kang in the context of Palembang's geography in the fourteenth and fifteenth centuries⁴⁷ and that Wang's freshwater

42. Pelliot argues that their report of fertile fields should be attributed to a local legend that had come to the merchants' notice. Pelliot, "Les Grands Voyages," p. 379.

43. *Ibid.*, p. 375. As an afterthought Pelliot wonders whether the freshwater channel was a reference to the Jambi river; *ibid.*, pp. 378-79.

44. Wang does not mention a freshwater channel in Java from which ships sailed to Sumatra. Tuban, one of Majapahit's ports, is not described by him as having a freshwater channel.

45. Wang, *Tao-i chih-lüeh*, p. 51, and Rockhill, "Notes on the Relations," p. 266; Wang, *Tao-i chih-lüeh*, p. 78, ignored by Rockhill. Neither place has been identified.

46. *Ibid.*, p. 105; Rockhill, "Notes on the Relations," p. 143.

47. According to the *Tz'ü-hai*, kang means not only "port" or "harbor" but also "bay"

channel is a description of the condition of the Old Channel and not the name of another channel. Because the coastline in the Palembang area is known to have been advancing over the centuries⁴⁸ and also because Wang was describing a fairway with the appearance of a riverine channel, the possibility arises that the fairway, known as the "Old Channel," was only one approach into a much wider expanse of water, appropriately described as the gulf of Palembang.

In proposing to translate Old Kang as "Old Channel," I observe that Wang Ta-yüan refers elsewhere in his work to several kang as navigational features. For example, he mentions "a distant and small kang (that) leads to this place,"⁴⁹ and he also describes the approach to Trengganu on the east coast of the Malay Peninsula as a kang.⁵⁰ Again, Ma Huan, describing the approach to Aru, notes that one enters a kang, known as the Fresh Water kang, to reach the ruler's residence.⁵¹ Moreover, the Mao K'un map, completed by 1422, always uses kang to indicate a waterway.⁵² The map also depicts a substantial inland gulf on the

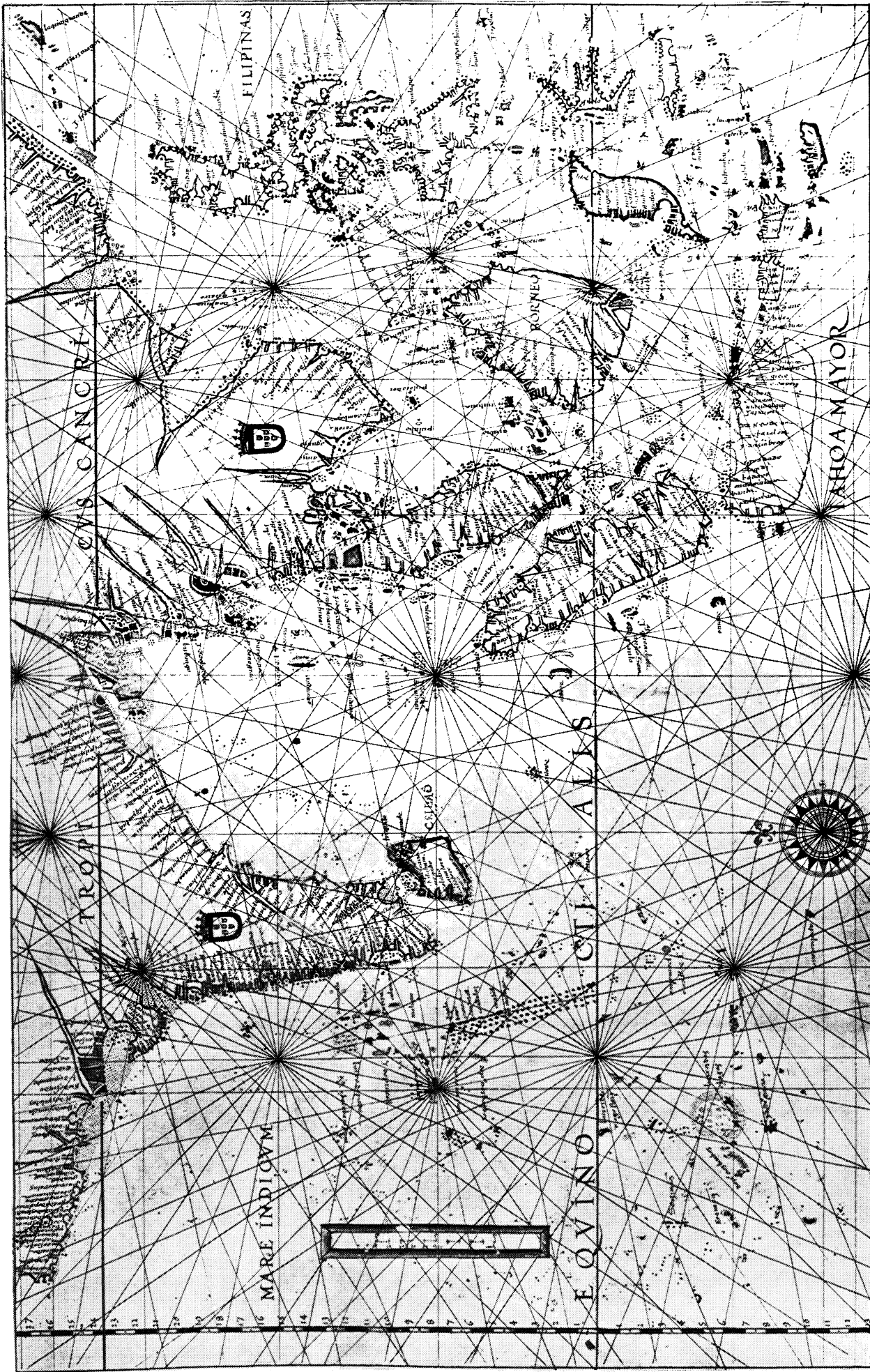
or "gulf" in the sense of being a navigable branch of a large body of water, emerging independently to join another large body of water.

48. For discussions of advancing coastlines in southeastern Sumatra, see B. Obdijn, "Zuid-Sumatra volgens de oudste berichten," Tijdschrift van het Koninklijk Nederlandsch Aardrijkskundig Genootschap, LVIII (1941), pp. 190-216, 322-41, 476-507, and "Den Geografische Kennis omtrent Sumatra in de Middeleeuwen," ibid., LIX (1942), pp. 46-75 and LX (1943), pp. 102-10; R. W. van Bemmelen, The Geology of Indonesia (2 vols.; The Hague: Nijhoff, 1949), IA, p. 299; Dinas Purbakala Republik Indonesia, "Garis Pantai Sriwidjaja," Amerta: Warna Warta Kepurbakalaan, III (1955), pp. 30-32; R. Soekmono, "Geomorphology and the Location of Srivijaya," Madjalah Ilmu-Ilmu Sastra Indonesia, I (1963), pp. 79-92; H. D. Tjia, et al., "Coastal Accretion in Western Indonesia," Bulletin of the National Institute of Geology and Mining, I (1968), pp. 15-45; H. Th. Verstappen, A Geomorphological Reconnaissance of Sumatra and Adjacent Islands (Indonesia) (Groningen: Wolters-Noordhoff, 1973); W. J. van der Meulen, "Suvarṇadvīpa and the Chrysē Chersonēsos," Indonesia, 18 (October 1974), pp. 1-40; M. J. G. Chambers and A. Sobur, "The Rates and Processes of Recent Coastal Accretions in the Province of South Sumatra: A Preliminary Survey," unpublished paper presented to the Regional Conference on the Geology and Mineral Resources of South East Asia, Jakarta, 1975.
49. Wang, Tao-i chih-lüeh, p. 38; Rockhill, "Notes on the Relations," p. 111. This channel has not been identified.
50. Wang, Tao-i chih-lüeh, p. 43; Rockhill, "Notes on the Relations," p. 118.
51. Mills (ed.), Ma Huan, p. 114.
52. Mao K'un (1511-1601) was the grandfather of Mao Yüan-i (died 1629) and had been associated with the coastal defense of China. Mao K'un and his superior officer were probably professionally interested in the details of this map. The map itself is believed to have been drawn as an aid to navigators about to start on Chêng Ho's sixth expedition of 1421-22, but may contain additions inserted during the course of the expedition, which did not visit Palembang. The likely date for the completion of the map is about 1422. Mao Yüan-i wrote the Wu-pei chih, a military text, and included what is now known as the "Mao K'un" map in chüan 240 of his work. The Wu-pei chih was presented to the Ming emperor in 1628, and the first edition was presumably printed shortly afterwards. On the origin and editions of the Mao K'un map see W. Franke, An Introduction to the Sources of Ming History (Kuala Lumpur: University of Malaya Press, 1968), p. 209; and Mills (ed.), Ma Huan, pp. 238-42. In this study I have used the example of the map in the specimen of the Wu-pei chih belonging to the Olin Library of Cornell University. On the last page of this specimen is a colophon, with the

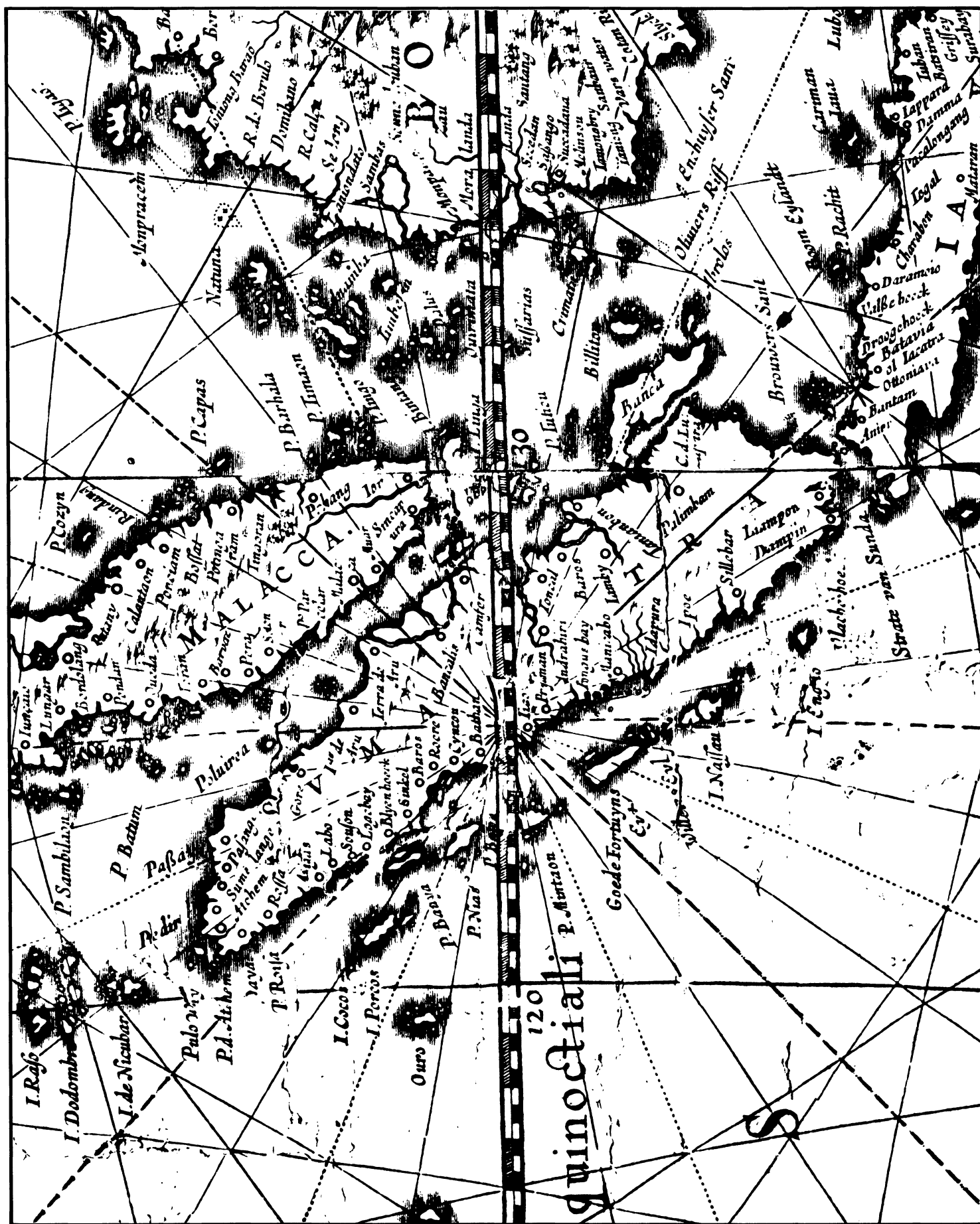
Palembang coast, with three channels (kang) into it.⁵³ The channels are separated by two islands, and the middle channel is called the "Old Kang."⁵⁴ The impression of a large channel-riddled gulf of Palembang is provided by William Lodewijcks' map, engraved by Baptista in 1597.⁵⁵ Three large islands in a gulf are shown on a map in Barros' *Fourth Decade*.⁵⁶ Joannes Blaeu's map of 1648 only reveals a wide estuary,⁵⁷ but the maps of Nicolas de Fer (1647-1720)⁵⁸ and Guillaume de L'Isle (1675-1725)⁵⁹ show islands in the Palembang gulf. Of special interest is the map produced with the help of the Jesuit mathematicians who accompanied Louis XIV's mission to Ayudhyā in 1688.⁶⁰ The mission sailed

Japanese date of 1664, that states that the edition is one edited by Ugai Nobuyuki. The southeastern Sumatra section of the Olin Library edition is reproduced as Map 1 (frontispiece) in this study and is recto 15 of chūan 240. I have also examined specimens of the same part of the map in the Library of Congress and the Columbia University Library. Three complete examples of the map have, to my knowledge, been published in more recent times: G. Phillips, "The Seaports of India and Ceylon, Part II," *Journal of the China Branch of the Royal Asiatic Society*, XXI (1886), map facing p. 42; Chou Yü-sên, *Chêng Ho hang-lu k'ao* (Taipeh: Chung-kuo hang-hai chi-shu yen-chiu hui, 1959), ch. 240, 14b/15a; Hsiang Ta, *Chêng Ho hang-hai t'u* (Peking: Chung-hua Shu-chū, 1961), p. 48. I discuss below discrepancies shown on the late Ming edition, represented by the Columbia University specimen, and the Japanese edition of 1664, represented by the Cornell University specimen. See Appendix A for a note on Ugai Nobuyuki, the Japanese editor of the *Wu-pei chih*, kindly prepared by Mr. Takashi Shiraishi.

53. Hsiang Ta, *Chêng Ho*, pp. 48, 52. The Pahang kang is shown at the top of Map 1.
54. See Map 1.
55. C. A. Lion Cachet and F. C. Wieder, *De Oude Weg naar Indië om de Kaap* (Amsterdam: Stoomvaart-Maatschappij Nederland, 1915), p. 25 (see Map 3 opposite). This map can be compared with Bartholomeu Lasso's map of 1590 on Plate LII in A. Cortesão, *Cartografia e Cartógrafos Portugueses dos Séculos XV e XVI* (2 vols; Lisbon: Edição da "Seara nova," 1935), II, p. 52. (See Map 4 opposite.)
56. Madrid edition, 1615, and reproduced as Map 5 (opposite). I do not know the vintage of the information on this map but I assume that it is of the sixteenth century; João de Barros, *Asia de Joam de Barros/dos Fectos que os Portugueses Fizeram no Descobrimento e Conquista dos Mares e Terras do Oriente* (4 vols.; Lisbon, Madrid: Germão Gelharde and Impressão Real, 1552-1612), IV, titled *Quarta Decada de Asia*, facing page 38. This map is found only in the volume held by Cornell University Libraries' Wason Collection.
57. F. C. Wieder (ed.), *Monumenta Cartographica* (3 vols.; The Hague: Nijhoff, 1928), III, Plate LXI. This is part of a world map published at the conclusion of the Treaty of Westphalia. See Map 6 opposite.
58. Map 7 opposite reproduces a copy of de Fer's map of Asia presented to William, Duke of Gloucester (1743-1807); Edward Wells, *A New Map of the East Indies, Taken from M^r de Fer's Map of Asia, Shewing their Chief Divisions, Cities, Towns, Ports, Rivers, Mountains, etc. Dedicated to His Highness William Duke of Gloucester* (London: Sutton Nicholls sculp., 1738[?]).
59. Dated 1705 (Map 8 opposite). The rivers into the gulf are depicted and also four small islands. I do not know the vintage of the information but presume that Louis XIV's missions to Ayudhyā, together with Dutch maps, contributed to the information; Guillaume de L'Isle, *Carte des Indes et de la Chine. Dressée sur Plusieurs Relations Particulières. Rectifiées par Quelques Observations* (Paris: The Author, 1705).
60. This map belongs to the Wason Collection in the Olin Library of Cornell University and is Map 9 opposite; n.a., *Le Royaume de Siam avec les Royaumes Qui Lui*



MAP 4





MAP 7

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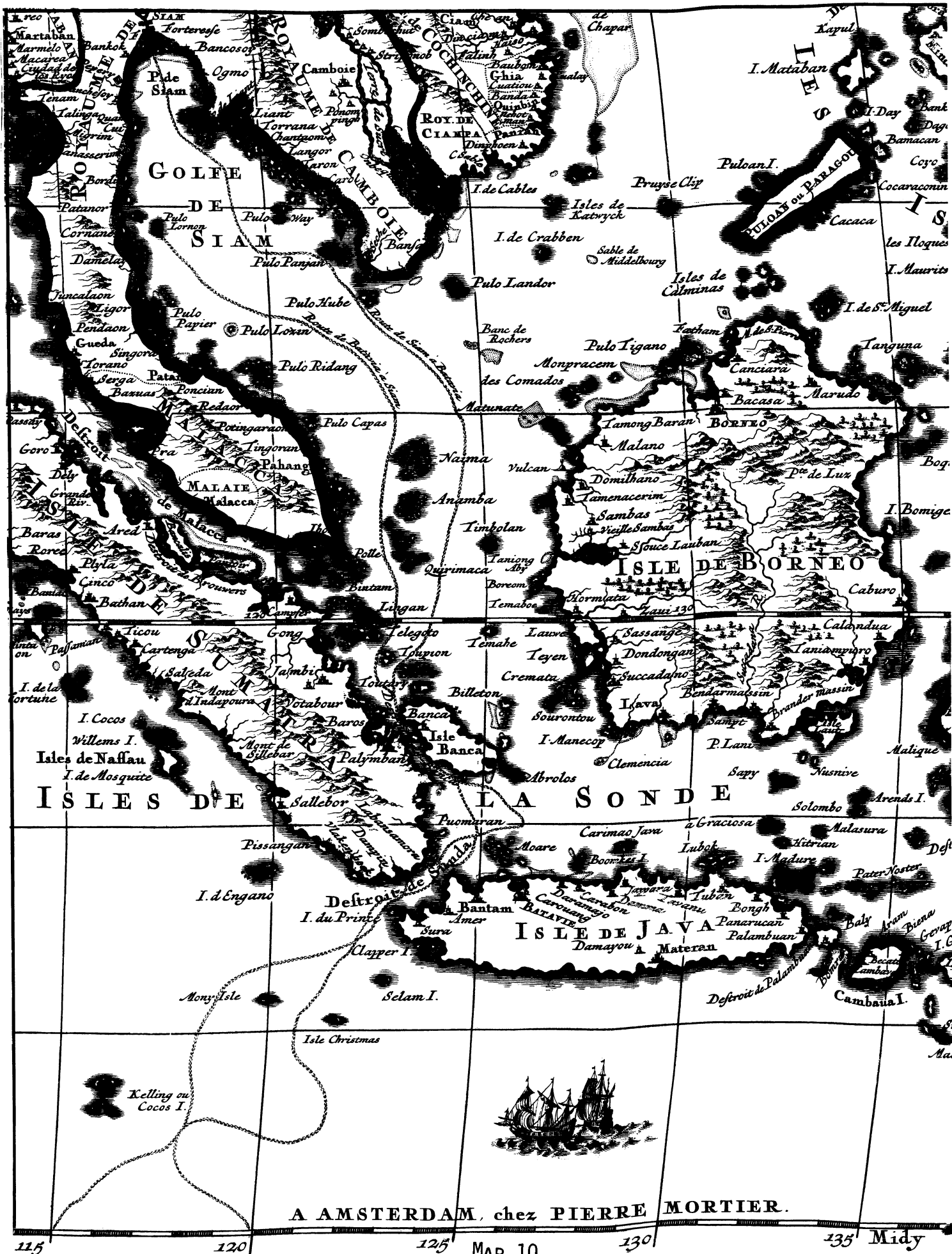
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INDEX

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A AMSTERDAM, chez PIERRE MORTIER.

MAP 10

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up the Bangka Strait and can be presumed to have had a privileged sight of the Palembang coast. The gulf is still identifiable, but the islands have become much larger.⁶¹

The details on these maps suggest that, between the early fifteenth and the early eighteenth centuries, the gulf was gradually becoming occupied by islands of mud and that the channels between the islands were increasing in number and length and were probably also becoming narrower. The Old Kang of Wang Ta-yüan and the early Ming writers were one or two such channels in the gulf as it existed in those times.

But the persuasive reason for translating "Old Kang" as "Old Channel" is provided by the *Shun-fêng hsiang-sung*, the sailing directions compiled on the basis of Chêng Ho's voyages.⁶² We shall see below that this text is consistent with the contents of the Mao K'un map in distinguishing three channels into the Palembang gulf and describes the central one, the fairway of the early fifteenth century, as the "Old Kang." Moreover, the text distinguishes between the "Old Channel," a geographical feature, and a settlement on its shores.

For these reasons I suggest that Wang Ta-yüan's informants knew the fairway to the port that concerned them as the "Old Channel" and described it as a "freshwater channel." The port was almost certainly called "Palembang," a name already familiar to Chao Ju-kua in the early thirteenth century. Wang decided to call this section in his book "Old Channel" because his informants chose to see themselves as trading in the well-known Old Channel, whose fairway they described for him. We need not follow Pelliot's suggestion that Old Kang was so called because it had once contained the Port of Śrīvijaya before the Śrīvijayan capital shifted to Jambi some time before the early thirteenth century.⁶³ Chinese traders may not have traveled overseas when "Palembang" first became a dependency of Śrīvijaya, as Chao Ju-kua says it was. Chinese are unlikely anyhow to have been interested in political niceties provided that trade was still profitable, as it was in Wang's day.

Sont Tributaires et les Isles de Sumatra, Andemaon, etc. et les Isles Voisines sur les Observations des Jesuites Envoiez par le Roy Louis XIV en Qualité de Ses Mathématiciens dans les Indes et à la Chine, Où l'On Voit Aussi la Route Qu'Il Ont Tenue par le Destroit de la Sonde Jusqu'à Siam (n.p.: n.p., ca. 1685).

61. Yet another French map, dated 1708, with what appears to be the envoys' routes to and from Ayudhyā, shows a gulf less blocked by islands. See Map 10 opposite; Pieter Mortier, Troisième Partie de l'Asie ou Partie de la Chine, les Isles de Borneo et Philippines etc. (Amsterdam: Mortier, 1708). I am grateful to Dr. Richard Howard, Curator of the Wason Collection in the Olin Library, for introducing me to this treasure of old maps.
62. For this text see: J. J. L. Duyvendak, "Sailing Directions of Chinese Voyages," T'oung Pao, XXXIV (1938), pp. 230-33; J. V. Mills, "Arab and Chinese Navigators on Malaysian Waters in About A.D. 1500," Journal of the Malaysian Branch of the Royal Asiatic Society (JMBRAS), XLVII, 2 (1974), p. 4, where Professor Needham is cited. The manuscript is in the Bodleian Library, Oxford (Laud MS Or. 145), and I have consulted a photocopy in the Library of Congress. The text has been published by Hsiang Ta, Liang chung, pp. 21-99. I am grateful to Dr. Mills for discussing with me textual problems relating to the manuscript.
63. Pelliot, "Les Grands Voyages," p. 376.

But the passing of time had affected the Palembang waterways in another manner. The Chinese who originally coined the expression Old Kang may have been familiar with a geographical situation where the term kang could be aptly used to refer to a large and open gulf rather than to a specific fairway through it, though we do not know the condition of the gulf when Chinese traders first visited it. Over the years, however, the gulf was becoming blocked by islands of silt, covered with mangrove trees, by shoals, and by an evolving network of channels continually being reduced to the status of extensions of rivers flowing from the interior. Already by Wang's day the important commercial thoroughfare had become a "freshwater" one. With the shrinking of the gulf, the scope of the term Old Kang shrank to mean a specific channel used by traders. Wang's freshwater channel was the Old Channel; it was still navigable, but it could not remain so indefinitely on account of continuous sedimentation.

The significance of the Air Bersih artifacts can now be reviewed in the light of Wang Ta-yüan's account of the Palembang area. The earliest date that the archaeologists are prepared to attribute to the settlement is the late thirteenth century.⁶⁴ The date and circumstances of the settlement's origin will be discussed below, but we are here bound to remark that Old Channel is an improbable name for the maritime approach to a settlement that could not have come into existence more than a few decades before Wang's day. Wang's Old Channel was a navigational route that was now resembling a large river and led to an earlier port than Air Bersih on the Musi river. His channel also led to the neighboring seat of the Malay ruler.⁶⁵ The Mongol mission of 1309 sailed on it. The Malay ruler need not have lived very close to his port. In the early fifteenth century the founder of Malacca is said to have lived inland.⁶⁶ Nevertheless, some form of communication, presumably by water, gave him the means of enforcing control over the port and of collecting tribute from visiting traders.

Before we consider what happened to Wang's channel, an ambiguity in Wang's text should be noted. He continues his account of the freshwater fairway with the statement that "the people use bamboo instead of ships." Ma Huan bases his account of Palembang geography on Wang's work, and he inaccurately interprets the itinerary as proceeding from the sea to the Old Channel.⁶⁷ He construes Wang's reference to the

64. Archaeological Research in Sumatra 1974, p. 12.

65. Wang says that there was a chief in the region of the Old Channel; Wang, Tao-i chih-lüeh, p. 85.

66. Cortesão (ed.), Suma Oriental, II, p. 236.

67. "Ships from every place come here; first they reach the freshwater estuary (kang) and [then] enter the [Bangka Strait]; they tie up their ships on the shore, where there are many brick towers on the shore; [then] they use small boats to enter the estuary (kang), and so they reach the capital (country)"; Mills, (ed.), Ma Huan, p. 98. I do not know why Ma Huan chose to incorporate and elaborate on Wang's text, with which he was familiar; ibid., p. 34. Ma Huan visited the Palembang area on the 1413-15 expedition; ibid., p. 35. His visit may be reflected in his construction of Wang's text as an account of a visit to Palembang. Wang's informants had left the Old Channel before they met Wang. Ma Huan accompanied the 1421-22 expedition, but the fleet did not visit Palembang; ibid., p. 14. During the 1431-33 expedition, he was detached from the main fleet and sailed straight from China to Bengal; ibid., p. 35. My suspicion is that the fleet in 1413-15 did not stay long in the Palembang area. Its objective was

"use of bamboo" as follows: "they use small boats to enter the estuary, and so they reach the capital (country)." ⁶⁸ Ma Huan's clumsy paraphrasing can be ignored. If he had correctly understood Wang's mention of "bamboo" as a reference to bamboo boats, he would have realized that the fairway was so shallow that cargoes destined for the port had to be transferred to light craft, creating a serious trading inconvenience and prejudicing the port's prosperity. Instead, Wang may have been referring to anchored riverine craft or even living quarters on boats in the immediate neighborhood of the port. Similarly, his reference to the stūpas, no doubt built by the Malay rulers, is probably another local detail brought to his notice by his informants.

Wang Ta-yüan's freshwater channel led to a port that cannot be identified with Air Bersih's port. The next question is: by when had the earlier port been abandoned in favor of a port on the Musi river that served Air Bersih?

The Mao K'un map, based on the sailing experiences of Chêng Ho's voyages, throws light on the question. The map does not contain sailing directions for this part of the coast, but the map itself survives. ⁶⁹ An even more important source for the historical geography of the Palembang gulf in the fourteenth and fifteenth centuries are the crisply phrased instructions in the *Shun-fêng hsiang-sung*, a compendium of sailing directions probably written about 1620 but based on conditions known in Chêng Ho's day. ⁷⁰ These two texts deserve examination on account of the Air Bersih excavations which represent the only identifiable settlement area anywhere in the Palembang region during the period under consideration. The results of the excavations were of course not available to Pelliot, Hsiang Ta, or Mills when they studied the subject.

The Mao K'un map plots the following details:

Eastern Channel (kang)
Old Channel
Western Channel (kang)
Old Channel
Jambi Channel (kang). ⁷¹

Semudera in northern Sumatra, where Chêng Ho was ordered by the Ming emperor to overthrow an usurper. The sailing schedule would have been tight, justifying a visit to Palembang only to take on supplies. Perhaps Ma Huan had this in mind when he referred to "the small boats" that enter the channel; he may have been thinking of the smaller ships in the Ming fleet. The main fleet, I suggest below, always anchored off the coast.

68. Ma Huan, trying to understand Wang, may have had in mind what he regarded as a comparable situation in the Surabaya area of Java: "At the estuary the out-flowing water is fresh. From here large ships have difficulty in proceeding; [so] they use small ships, which travel more than twenty li till they reach this district." *Ibid.*, p. 90.

69. Map 1 (frontispiece) is a reproduction of the map in the Olin Library's specimen of the *Wu-pei chih*.

70. See note 62 above.

71. The Olin Library specimen of the Mao K'un map, a specimen of the Japanese edition of 1664, shows the characters Chan-pi. The map reproduced by Chou Yü-sên in his *Chêng Ho hang-lu k'ao* does likewise. The specimens of the map in the Library of Congress, in the Columbia University Library, and published by Phillips show Pai-pi instead of Chan-pi. The specimen published by Hsiang Ta also

A curious feature of this map is that it shows two Old Channels. The Chinese convention was that Sumatra extended from east to west,⁷² and thus the Chinese map's "eastern" Old Channel, situated between two islands, in fact must have been to the southeast of the other Old Channel. This northwestern Old Channel, enclosed in a rectangle, is improbably shown as lying some distance inland. The *Shun-fêng hsiang-sung* is concerned only with the southeastern Old Channel, to which it gives detailed attention. This Old Channel was in the Palembang area; as we shall see, the voyage to it was from the Bangka coast off the Menumbing hills at the northwestern corner of that island.

The Mao K'un map and also the sailing directions indicate that the southeastern Old Channel was only one of three channels into what must have been a fairly wide expanse of water. Thus the directions for the voyage from mainland Southeast Asia to Sunda in western Java state that a ship, after passing Pulau Saya southeast of the Lingga archipelago, makes its way to the northern end of Bangka. The voyage to the Old Channel continues as follows:

Steer [from Pulau Saya] exactly south by west for three *kêng*⁷³ and proceed quickly to the Seven Islands on the port side.⁷⁴ Sail south-southwest for seven *kêng* and make Bangka mountain. Niu-t'ui-ch'in ("ox leg lute") is the second peak lying south-east off the port side.⁷⁵ In front [of this peak] is a sunken rock. Steer S.W. by W. The peak is seen off the stern. Proceed to the Old Channel. The shore line has three channels.⁷⁶ The middle one is the correct passage. In [this channel] there is a small islet.⁷⁷

Elsewhere the final stage of the voyage from Malacca to the Old Channel is described:

shows Pai-pi. Hsiang Ta assumed that Chan-pi was intended. Facing the Sumatran toponyms on the map and out at sea are the Menumbing hills in the northwestern corner of Banka Island and Berhala Island (Kuan hsü). Berhala Island appears in Arab sailing directions of the fifteenth century; G. R. Tibbetts, *Arab Navigation in the Indian Ocean Before the Coming of the Portuguese* (London: Royal Asiatic Society of Great Britain and Ireland, 1971), p. 496.

72. Pelliot, "Les Grands Voyages," p. 373, note 2.
73. The period of one watch (*kêng*) is equivalent to 2.4 hours; Mills (ed.), *Ma Huan*, p. 249.
74. I have benefited from Dr. Mills' composite English/Arab Chinese Compass, published in his "Arab and Chinese Navigators," p. 10. For renderings of nautical terms used in this and the following excerpts, see Chou Yü-sên, *Chêng Ho hang-lu k'ao*, pp. 101-5.
75. We shall see that Niu-t'ui ch'in is the central hill in the Menumbing hills behind Muntok town in northwestern Bangka.
76. For the translation "shore line" I have been influenced by Dr. Mills' translation of the word *k'un-hsin* as "land"; Mills, "Arab and Chinese Navigators," p. 26. I am grateful for Dr. Mills's detailed analysis, contained in a letter to me dated June 28, 1975, of the fifty-three references in the *Shun-fêng hsiang-sung* to *k'un-hsin*. Dr. Mills has convinced me that the term represents a landmark that could be seen, reached, followed, or left behind, and could be of appreciable size.
77. Hsiang Ta, *Liang chung*, p. 64. The return voyage is as follows: "[After sailing up the Bangka Strait], the ship reaches the middle of the Strait and spots Niu-t'ui ch'in hill. A strip of land lies off the port side. In it is a *chou* ("settlement"). Here is the estuary of the Old Channel." *Ibid.*, p. 65.

Steer exactly S.E. by E. [from a solitary islet south of the Alang Tiga islets off the east coast of Sumatra].⁷⁸ Follow the islet five watches in six or seven fathoms of water.⁷⁹ Proceed quickly for five watches and reach the estuary of the Old Channel. In the estuary there is a settlement (chou).⁸⁰ This is the correct passage, and it must be accurately identified as such.⁸¹

This excerpt implies that the Old Channel was one of several channels, for mariners are warned to identify the correct one. The following excerpt reveals the landfall awaiting those who had taken the correct passage into the Old Channel at the end of a voyage from Tuban in Java:

Proceed for three watches and make the mouth [estuary] of the Bangka mountain channel [the southern entrance to the Bangka Strait]. On the starboard side [the Bangka side] reach an island called Lang-ka [? Nangka islands]. Do not get close to it. There is *lao-ku* rock.⁸² The water is shallow. At the end of a strip of land a point juts out on the port side [the Sumatran coast]. The water is shallow. Do not get close to it. Steer N.W. by W. for ten watches and make the correct passage [to] the Old Channel. [In the passage] is a settlement (chou). People are seen nearby.⁸³

Landfall awaiting those who have identified the correct passage is therefore a settlement on a shore of the middle channel, and two further glimpses of the settlement plot its position even more exactly. The first is in an itinerary from Sunda in western Java to Pulau Tioman off the east coast of the Malay Peninsula. The voyage is via the Old Channel:

[The itinerary reaches Lucipara Island⁸⁴ off the east coast of Sumatra and proceeds northwards up the Bangka Strait.] The left side [the Sumatran coast on the Strait] has shallows. The right side [the

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78. I follow Dr. Mills' identification of the Alang Tiga islets; Mills (ed.), Ma Huan, p. 284.
79. Hsiang Ta, Liang chung, pp. 6-7, defines "fathom" as "five old ch'ih." According to Mills (ed.), Ma Huan, p. xvii, one Ming ch'ih equals 12.24407 inches. A fathom would have been about five feet.
80. In Ming times chou meant an administrative unit comparable to a prefecture. The sailing directions use chou in this sense when they refer to Hsin chou, the "New Chou" and a town in Champa; Hsiang Ta, Liang chung, p. 55. The sailing directions also use chou to mean an island, but in this case the radical for "water" is added; Laud Or. 145, 50r. In the corresponding passage in Hsiang Ta's Liang chung, p. 59, the radical is omitted in error. Those who recorded the information in the sailing directions were Ming officials and were certainly thinking of the Old Kang Pacification Office, which I identify below as Air Bersih. The previous excerpt mentions a small islet in the fairway of the central channel, but this feature was probably only a small mud bank.
81. Hsiang Ta, Liang chung, pp. 85-86.
82. Apparently a kind of coralline rock; Mills, "Arab and Chinese Navigators," p. 73, note 261.
83. Hsiang Ta, Liang chung, pp. 69-70. We shall see that the compilers have carelessly omitted a reference to the Menumbing hills in northwestern Bangka from this part of the itinerary.
84. I follow Dr. Mills for the identification of Lucipara Island, transcribed as San-mai hsü (Maspari islet); Mills (ed.), Ma Huan, p. 215.

Bangka coast] is deep and ships can make their way along it. Take a sounding for 4-5 fathoms. Follow the shore line for ten watches.⁸⁵ [When] a sounding of 5-6 fathoms is taken, the mouth of a channel (kang) is seen on the port side. A settlement (chou) lies off the starboard side [when the ship enters the channel]. This is the Old Channel.⁸⁶

The other glimpse, a part of a description of physical features observed on the voyage from Java to Malacca, is identical:

Old Channel estuary

. . . .⁸⁷ The estuary of the channel contains a settlement (chou). [The settlement] lies off the starboard side [of the ship].⁸⁸

The impression that emerges from the Mao K'un map and the sailing directions is that in the early fifteenth century the Old Channel's estuary was one of three neighboring estuaries and that care had to be taken to identify the correct fairway into the Palembang gulf. The fairway led to a settlement that lay off the starboard side of a ship and therefore on the northern shore of the fairway. The settlement's name is not given. The compilers felt, as Wang Ta-yüan had felt before them, that it was sufficient to identify the Old Channel that served the port. Provided that navigators were alert, ships would not run into difficulties on account of shallow water off the estuary. Indeed, ships could anchor in seven or eight fathoms.⁸⁹ The Ming fleet must have anchored there during its seventh expedition (1431-33). The fleet lay off the Old Channel from July 24 to 27, 1432.⁹⁰ The draught of the largest ships is unknown, though Dr. Mills believes that it could not have been less than twenty feet.⁹¹ The fleet's complement was 27,550 men in 1432,⁹² and its smaller vessels were probably detached to visit the shore and obtain provisions and fresh water.⁹³

The presence of the Chinese headman at Air Bersih explains why care was taken to describe the Old Channel fairway as it was known in the early fifteenth century. The headman was in communication with his overlord, the Ming emperor, and the arrivals of the fleet would have been the most exciting episodes in the history of Air Bersih. Chêng Ho's fleet is recorded as visiting the Palembang area during the voyages of 1405-7, when a naval battle was fought against the pirate Ch'ên

85. I am grateful to Dr. Mills (letter dated June 28, 1975) for encouraging me to translate k'un shên as "land."

86. Hsiang Ta, Liang chung, p. 57. A reference to the Menumbing hills is again carelessly omitted by the compilers.

87. I do not understand this sentence. I like Dr. Mills' suggestion, privately communicated to me: "The country [has] no mountains."

88. Hsiang Ta, Liang chung, p. 46.

89. "Here is the estuary of the Old Channel. Take a sounding for 7-8 fathoms. This is a good place for anchoring"; ibid., p. 44.

90. Mills (ed.), Ma Huan, p. 17.

91. Ibid., p. 31.

92. Ibid., p. 15.

93. Ibid., p. 18, for the different types of ship in the fleet. The fleet, with Ma Huan on board in 1413-15, probably anchored off the Palembang coast. The navigational situation was different from what it had been in Wang's day, and Ma Huan can be forgiven for not understanding the meaning of Wang's text about the Old Channel.

Tsu-i, of 1413-15, of 1417-19, and of 1431-33.⁹⁴ The Palembang waterways were sufficiently well known for accurate information to be available in China. The "Old Channel" fairway of that time is undoubtedly the Musi river. The residents were seen on the starboard side of the ship, as would happen when the ship sailed towards the port of Air Bersih on the northern bank of the Musi. Air Bersih was near the southern shore of the island shown on the Mao K'un map as separating the fairway from the western channel. On two occasions the sailing directions state that the settlement is in the estuary of the Old Channel.⁹⁵ Only one islet is identified in the fairway before the settlement is seen, another detail that indicates that the Musi river opposite modern Palembang city was not far from the sea and was certainly not separated from the sea by the large islands and tributaries depicted on twentieth-century maps. The islet may have been "Pulau Gombora," "Pulau Salanama," or "Pulau Borang" on the "Nieuwe kaart der rivier van Palembang" of 1822,⁹⁶ though in the early fifteenth century the island in question was still very small.⁹⁷

Three channels comprised what remained of the old Palembang gulf in the early fifteenth century: the western channel, the central one to Air Bersih, and the eastern channel. The sailing directions ignore the western channel. The Mao K'un map depicts it as extending some distance into the Sumatran interior and beyond the "island" where the Air Bersih settlement was seen, and therefore beyond the Palembang peninsula. Ming mariners had no occasion to sail further up the Old Channel than Air Bersih, which was still close to the sea, and we should not interpret too literally the details of the western channel as shown on the Mao K'un map. Nevertheless, the coastal configuration north of modern Palembang city was evidently very different in the early fifteenth century, and the explanation is simple. The alluvial plain north of Palembang city is largely the consequence of mud deposited by the Musi and its long southern tributaries, creating new rivers such as the Sungsang that find their way northwards to the sea. This plain is a prolongation of the plain south of Palembang. The other rivers that have contributed to the sedimentation of the northern part of the gulf are the Tungkal and Lalang, flowing over relatively short distances northwest of Palembang city. Even today the estuary of the Air Banjar Masin at the extreme northern end of the old gulf is still quite broad,⁹⁸ and its name ("Flood of Salt") suggests that its saline content had for centuries been uncontaminated by mud and river water. We can therefore conclude that in the early fifteenth century the extent of sedimentation north of Palembang was much less than it was to the south, where the Mao K'un map shows that an "island" separated the Musi channel of Air Bersih from the southern shore of the gulf. Wang Ta-yüan's freshwater channel had been used by maritime shipping, and

94. Mills (ed.), Ma Huan, pp. 12-19.

95. Hsiang Ta, Liang chung, pp. 46, 86. Even today the Musi experiences a tidal flood, usually about half an hour later than high and low tide; Eastern Archipelago Pilot (London: Hydrographic Office of Great Britain, 1890-) IV, p. 64.

96. De Heldhaftige Bevreeding van Palembang, frontispiece. See Map 2 on p. 8 above.

97. Several of the early European maps reproduced on pages 13-20 above emphasize the amount of open water in the gulf. Nevertheless, according to the mathematicians with Louis XIV's mission to Ayudhyā (Map 9), large islands were appearing towards the end of the seventeenth century. The French envoys sailed through the Bangka Strait.

98. Eastern Archipelago Pilot, IV, p. 67. Louis XIV's envoys, however, seem to have been off the Palembang gulf at a time when the sedimentation of the northern part of the gulf was under way.

it must have been relatively large and therefore plotted somewhere on the Mao K'un map. Wang's channel, however, was silting and is unlikely to have been the extensive western channel on the map.

The sailing directions ignore the apparently still wide western channel but tell us something about the eastern channel and its physical condition. Evidently this channel was not far south of the Air Bersih channel.

To establish the approximate location of the eastern channel we shall first describe the approach to the Old Channel by ships making their way across the Bangka Strait. The direction of the voyage to the Old Channel from everywhere except Malacca was fixed by identifying a "sunken rock" islet off the northwest coast of Bangka. The islet was spotted by ships sailing across the South China Sea via Pulau Saya and the Seven Islands⁹⁹ or by ships working their way up the Bangka Strait,¹⁰⁰ and the islet was always identified after the Menumbing hills had come into sight. These hills are an important landmark, as the *Eastern Archipelago Pilot* emphasizes:

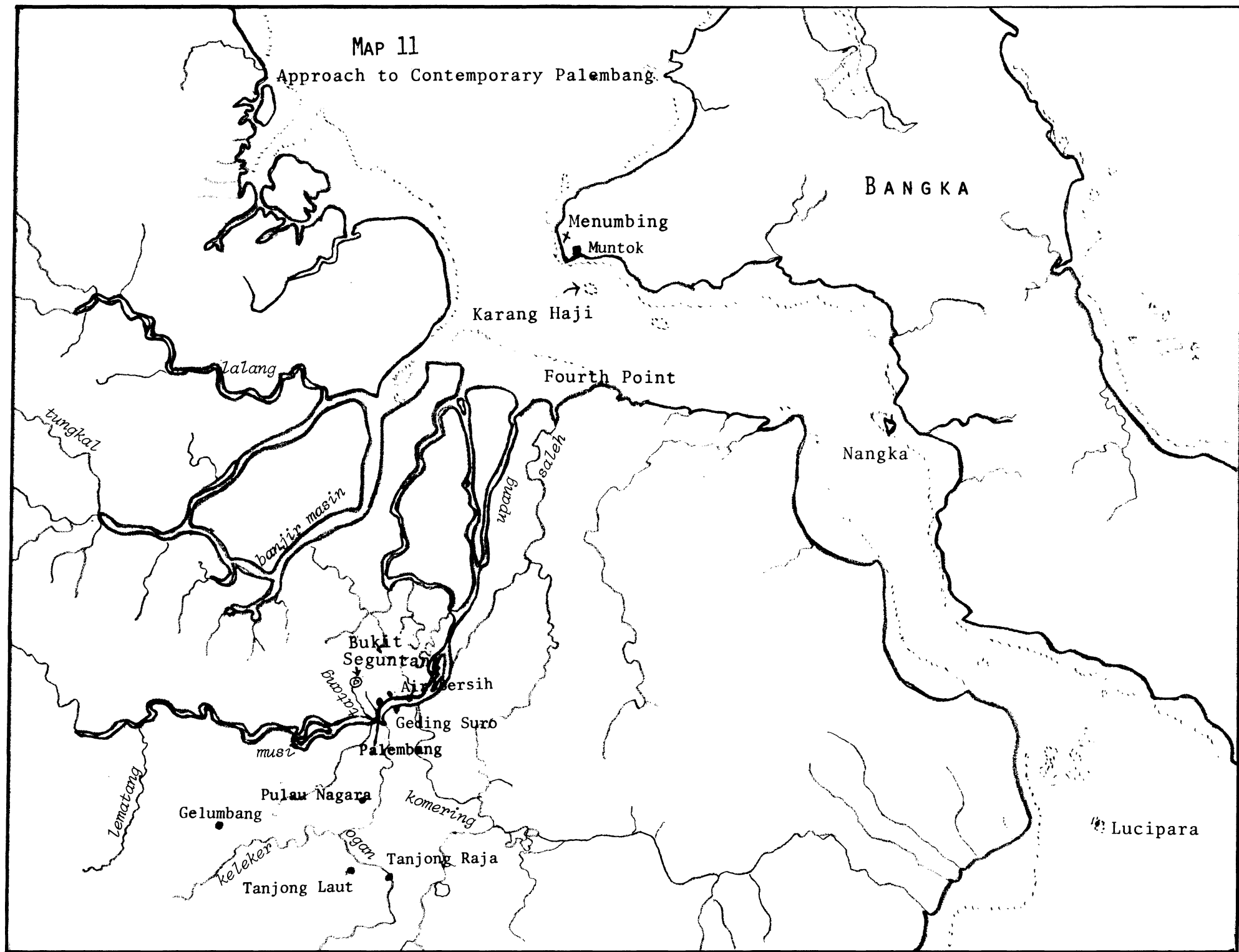
The Menumbing hills extend in a long range northward of Muntok, and rise to a blunt summit; their slopes are covered with imposing masses of granite, with luxurious vegetation between. It frequently happens that these hills are the only objects on the Bangka coast visible from the Sumatran shore.¹⁰¹

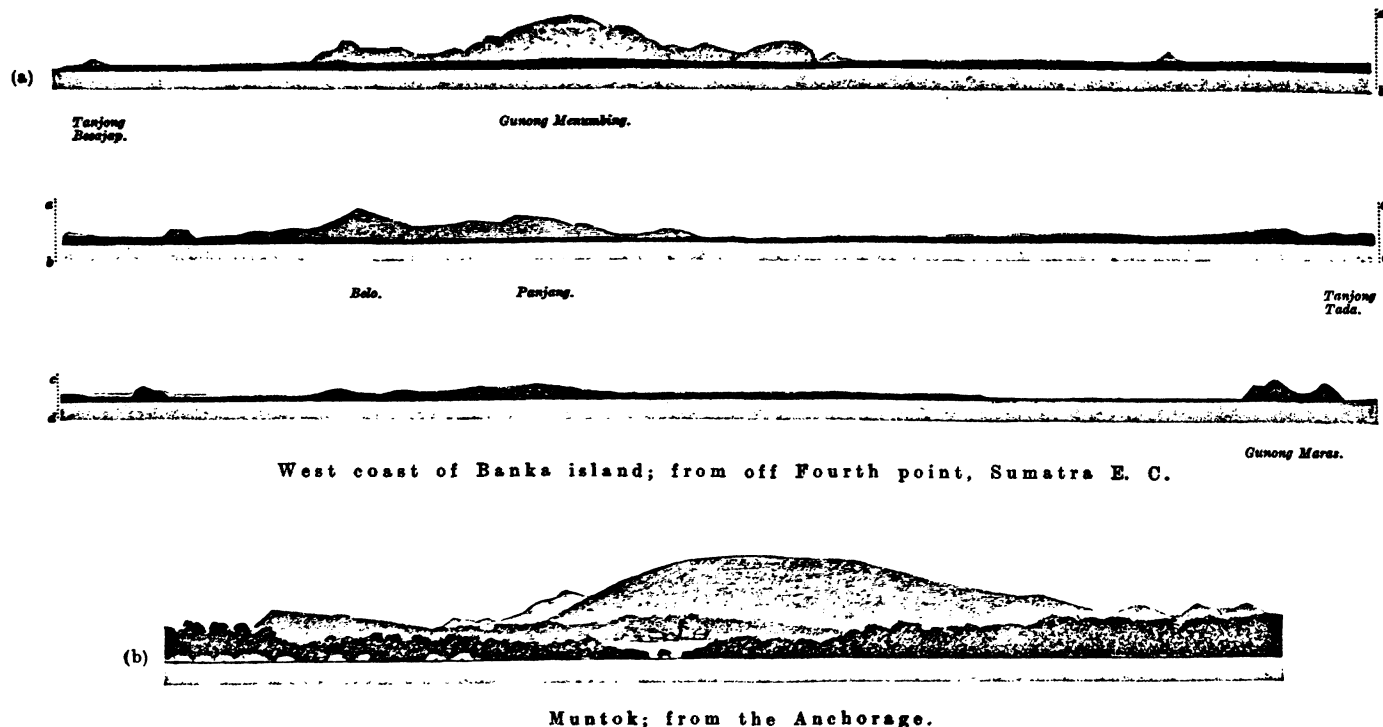
The Ming Chinese knew the central slope of the Menumbing hills as Niu-t'ui-ch'in, or "ox leg lute," and the "sunken rock" islet was in front of this slope.¹⁰² The islet is Karang Haji, a reef lying at about one and a quarter miles southwest of Tanjong Kelian close to Muntok town on the northwest coast of Bangka. The reef consists of sand and clay, with several drying black rocks over it.¹⁰³

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99. "[Proceeding from the Seven Islands in a south-southwest direction], the ship makes Bangka mountain. Niu-t'ui-ch'in is the second peak lying southeast on the port side"; Hsiang Ta, *Liang chung*, p. 64. See *ibid.*, p. 57, for another reference to the "second peak." The reference to this peak as "the third one," given in the sailing directions' account of the sunken rock (*ibid.*, p. 44), must be an error. *Laud MS Or.* 145, 16r, in fact gives "two" and not "three," though Hsiang Ta is surely right to interpret the character as a faded version of "three."
 100. Hsiang Ta, *Liang chung*, p. 65. Sailors in the Bangka Strait were advised to keep to the eastern side of the Strait, where there were seven or eight fathoms. The western side had four fathoms; *ibid.*, pp. 42, 57, 65. Ships, keeping close to the Bangka shore, were bound to see the Menumbing hills, and this is why I suggested above that the omission of the hills in two itineraries northwards through the Strait is a result of carelessness on the part of the compilers of the directions. Dr. Mills notes that the sailing directions contain some errors; Mills, "Arab and Chinese Navigators," p. 5.
 101. *Eastern Archipelago Pilot*, IV, p. 70.
 102. Hsiang Ta, *Liang chung*, pp. 57, 64, 65.
 103. *Eastern Archipelago Pilot*, IV, p. 71. The reef, well known to Portuguese sailors in the sixteenth century, is mentioned in Linschoten's *Reys Gheschriфт*; Jan Huygen van Linschoten, *Reys Gheschriфт vande Navagation der Portugaloyers*, being the fourth and fifth volumes of his *Itinerario, Voyage ofte Schipvaert van Jan Huygen van Linschoten naer Oost ofte Portugaels Indien* (5 vols.; The Hague: Nijhoff, 1910-39). The fourth and fifth volumes are edited by J. C. M. Warnsinck. The part of Linschoten's work referring to the reef is translated in Appendix B of this essay. See also Map 11 opposite.

MAP 11

Approach to Contemporary Palembang





The sea beyond the "sunken rock" islet had nine fathoms,¹⁰⁴ and here was the point of departure for the Old Channel.¹⁰⁵ Sailors knew that they were on the correct course when they saw the Menumbing hills off their stern as they steered southwest by west.¹⁰⁶ The shoreline of the Palembang coast, with its three channels, would eventually come into sight, and the view seen by the sailors over their shoulders was similar to the view sketched in the *Eastern Archipelago Pilot* of the Menumbing hills as seen off the Fourth Point on the Sumatran coast.¹⁰⁷ The Fourth Point is slightly east of the estuary of the present-day Saleh river, which had not yet come into being in the early fifteenth century.

Having crossed the Bangka Strait, the pilots had to take care to identify the middle channel, known to them as the Old Channel, and in this context an important reference is made to the eastern channel. In a list of navigational features observed during the voyage from southern Vietnam to Java and appearing immediately after "Bangka mountain" the following notice appears:

Old Channel estuary

At the opening of the eastern channel's estuary there is mud.
The water is shallow and at three fathoms. [This estuary] faces
Bangka mountain. Out at sea there are thirty fathoms of water

104. Hsiang Ta, *Liang chung*, p. 44.

105. *Ibid.*, p. 64.

106. *Ibid.*

107. *Eastern Archipelago Pilot*, IV, facing page 70. A copy of this view is given above.

[and] submerged rocks. It is necessary to be careful. Be careful.¹⁰⁸

Thus the eastern channel's estuary, south of the Old Channel, is mentioned as the navigational feature closest to the estuary of the Old Channel, through which ships passed to reach Air Bersih. The two estuaries were sufficiently close to justify a warning to mariners about the shallow water in the eastern channel. This warning is the only one issued in the area of the Palembang gulf.

Before we consider the geographical implications of the description of the eastern channel, we should observe that, although the water in its estuary was shallow, there was still a depth of three fathoms, or about fifteen feet. Two maritime approaches to Cambodia, described as "correct passages," were only four and three fathoms in depth respectively.¹⁰⁹ The passage with three fathoms had mud and sand.¹¹⁰ The usefulness of the eastern channel for sea-going ships could not be prolonged indefinitely in this region of advancing coastlines, but careful navigators could still have used the eastern channel in the early fifteenth century.¹¹¹ Sailors in Chêng Ho's day were warned of the eastern channel not on account of navigational snags but simply because it did not lead to the Air Bersih settlement.

The sailing directions show that a sizeable channel, known as the eastern channel, flowed immediately south of the Musi estuary and that its mouth was silting. The Palembang coastline would not have changed substantially since Wang Ta-yüan's time, when his informants were familiar with a freshwater channel that led into the Bangka Strait.¹¹² Were the freshwater and eastern channels one and the same stretch of water?

Pelliot considered this identification but objected that the Mao K'un map did not mention a freshwater channel.¹¹³ He was writing, however, at a time when scholars thought in terms of a single "Palembang river," and their perspective was uncomplicated by considerations of

108. Hsiang Ta, Liang chung, p. 43.

109. Ibid., pp. 59, 81.

110. Ibid., p. 81.

111. The draught of smaller seventeenth century English warships of up to 375 tons in burden, carrying between twenty and thirty guns, was less than fourteen feet, and these ships could have negotiated the eastern channel, provided care were taken to avoid running aground on mudbanks. For details of the draught of the warships, see Joseph R. Tanner (ed.), A Descriptive Catalogue of the Naval Manuscripts in the Pepysian Library at Magdalene College, Cambridge (4 vols.; London: Printed for the Navy Records Society, 1903-28), I, pp. 278-79. I am grateful to Professor Daniel Baugh for this reference.

112. Several of the early European maps, reproduced on pages 13-20 above, show islands in the Palembang gulf. Lodewijcks' map of 1597 (Map 3 at p. 13) has a legend under the site of the Palembang town that reads: "the mouth (bocas) of Palimban." See Appendix B for an account of the maritime approach to the bocas known in Portuguese itineraries and reproduced by Linschoten. The town on Lodewijcks' map would have been on or near the Geding Suro site on the northern shore of the Musi. Immediately south of the town the map shows a small break in the coastline, suggesting that several rivers close to each other flowed into the western extremity of the gulf. These rivers may correspond to the eastern channel on the Mao K'un map.

113. Pelliot, "Les Grand Voyages," p. 378.

encroaching mud and shifting channels. He could therefore disregard the possibility of two different channels, used by traders at different times, and envisage only one estuary that led to a port in the vicinity of modern Palembang city. Thus, the absence of a reference on the Mao K'un map to a freshwater channel discouraged Pelliot from pursuing the possibility that it was the same waterway as the eastern channel.

But the similarity between Wang's text and the early Ming texts, more significant than the difference noted by Pelliot, needs to be emphasized. Wang and the Ming writers are equally interested in an "Old Channel," and their texts differ only in that Wang's interest is limited to the fairway of his day, known as the Old Channel and described as a freshwater channel to the Bangka Strait, while the Ming writers enumerate the three channels of the Palembang gulf in order to distinguish the fairway to Air Bersih. The geographical situation had not changed out of recognition between 1330 and the early fifteenth century, and Wang's channel can be expected to appear somewhere on the Mao K'un map. His channel cannot be identified with the western one because this channel in the northern part of the gulf was the one surviving area in the early fifteenth century that still contained a great deal of open water, and it was also the last part of the gulf to be overtaken by the sedimentation proceeding northwards from the Palembang peninsula by means of the Musi river and its southern tributaries.¹¹⁴ The Ming sailors noted only an islet as they approached the Air Bersih settlement on the Musi, which indicates that the Musi river had not yet extended itself far north to become what was later known as the Sungsang river.

The western channel can be eliminated as the location of Wang's freshwater channel. Only the eastern channel has to be considered, and we need not be puzzled by the circumstance that Wang's informants refer to a freshwater channel, whereas the Ming writers use the term "eastern" channel. Wang was merely reproducing a term used by Chinese merchants, but the cartographers and compilers of Ming nautical literature were concerned to give a precise geographical description of the condition as well as the location of the waterways in order to facilitate the identification of what they knew as "the correct route" into the gulf. The absence of a reference to a freshwater channel on the Mao K'un map is not at all surprising. What is significant in the Ming records of the Palembang coast is the mention made of an apparently substantial channel, the eastern one, with its shallow and muddy estuary. This is the only channel into the Palembang gulf that would have been described as a freshwater one less than a century earlier, and the correspondence in the silting conditions is as exact as can be reasonably expected. Wang's informants knew the eastern channel as the fairway between the port of Palembang and the Bangka Strait in the early fourteenth century.

The proposed interpretation of the documents of the fourteenth and fifteenth centuries has a geographical implication. The freshwater channel, otherwise known as the eastern channel and flowing south of the Musi river, was becoming part of the southern shore of the gulf of Palembang. The channel could still have been negotiated if the Chinese settlement at Air Bersih had not required an alternative passage through the gulf. Nevertheless, the southern shore of the gulf was silting at an annual rate that has been variously estimated at between seventy-five

114. Maps 3-10 show that the outline of the ancient gulf persists chiefly because of the open waters of the northern part.

and one hundred and twenty-five meters.¹¹⁵ In the two centuries whose history we have been considering, the southern shore of the gulf was advancing to form what has become today the southern shore of the Musi and the lower reaches of the Ogan and Komering rivers. The anchorage off the gulf, recommended in the sailing directions, may have been anything up to forty or fifty miles southwest of the present Sumatran coastline facing the Menumbing hills on Bangka Island. We shall return to the question of the shrinking Palembang gulf when we consider possibilities for locating commercial centers earlier than Air Bersih.

One curious feature on the Mao K'un map, noted above, remains to be elucidated. The example of the map in the Olin Library shows another Old Channel further up the coast, and it is enclosed in a rectangle.¹¹⁶ This Old Channel is northwest of the Palembang gulf and is sited ashore between an unnamed gulf and the Jambi channel. Where was this place?

The sailing directions ignore this Old Channel. To explain why it is plotted on the map, we have to take into account some misapprehensions in the court of the first Ming emperor (1368-98) about the political status of the southeastern coast of Sumatra during that reign. Wang Ta-yüan had distinguished between San-fo-ch'i and the Old Channel, but the first Ming emperor knew only of San-fo-ch'i. After 1377 his court lost touch with developments in this part of Sumatra.¹¹⁷ All that was known was that the Javanese had attacked San-fo-ch'i in 1377 after its ruler had sought investiture from the Ming emperor, and henceforth the Chinese officials always remembered ruefully that San-fo-ch'i was Javanese vassal territory. Thus in 1397 the emperor attributed an unspecified deterioration in overseas trade to the effects of the Javanese attack on San-fo-ch'i in 1377 and required the Javanese ruler to restore order in his Sumatran dependency.¹¹⁸ But the emperor had not realized that the cause of the deteriorating trade was not the attack of 1377 but another Javanese attack, this time aimed at the Palembang area, shortly after Hayam Wuruk's death in 1389. The Javanese obeyed the emperor's order by appointing a chief in the Palembang area,¹¹⁹ whose authority was quickly overthrown by the overseas Chinese there.

115. See Tjia et al., "Coastal Accretion in Western Indonesia." Mohnike has suggested that Palembang city was still a seaport about four hundred years ago; van Bemmelen, The Geology of Indonesia, IA, p. 299. Some believe that the rate of accretion has increased in more recent times.

116. Not all examples of the Mao K'un map (Map 1) contain this rectangle. The rectangle appears on the Japanese 1664 edition, represented in the Olin Library, and also on the specimen reproduced by Chou Yü-sên, Chêng Ho hang-ku k'ao, p. 29. The examples in the Columbia Library and the Library of Congress and also the map reproduced by Phillips omit the rectangle. The map published by Hsiang Ta also omits it. I think that it is significant that the two examples with the rectangle refer to Chan-pi (Jambi) and not to Pai-pi as the name of the gulf close to the northwestern Old Channel. I suggest below why I believe that the examples with the rectangle are accurate in respect of the southeastern coast of Sumatra.

117. Sino-Malay relations in the reign of the first Ming emperor are examined in chapter 5 of my Fall of Śrīvijaya.

118. This episode is discussed in my Fall of Śrīvijaya, p. 68.

119. The reference to the Javanese appointment of a chief can be found in my Fall of Śrīvijaya, p. 71.

Early in the reign of the Yung-lo emperor (1403-24) contact with this part of Sumatra was resumed when Ming officials met representatives of the Palembang Chinese. The local Chinese identified themselves as living in the region of the Old Channel, and it was in this way that the Ming court first came to hear of the term "Old Channel." The Chinese also described the Javanese attack in the early 1390s in order to provide the background to their subsequent assumption of authority. Nevertheless, the Ming court continued to assume that the expression "Old Channel" came into use after the Javanese attack on San-fo-ch'i in 1377, and thereafter the court understood the name to refer to all lands formerly under the San-fo-ch'i ruler. Indeed, as early as 1374 the Palembang ruler had been identified as living in part of San-fo-ch'i.¹²⁰

The officers in Chêng Ho's fleet, including Ma Huan, subscribed to the official Ming understanding of the political geography of south-eastern Sumatra. Ma Huan's poem, commemorating the expedition of 1413-15, refers to San-fo-ch'i but not to the Old Channel.¹²¹ In his account of the Old Channel,¹²² which he identified with Palembang, he says that it was under Javanese supremacy; he is merely reproducing the view of the first Ming emperor, who had been humiliated in 1377 when he invested the San-fo-ch'i ruler and incurred Hayam Wuruk's wrath. Ma Huan's evidence about the equivalence of San-fo-ch'i and the Palembang Old Channel cannot, therefore, be cited to prove that San-fo-ch'i, the Sung name for Śrīvijaya and retained by the Ming, had its center in the Palembang area.

In the eyes of the Ming court, Old Channel therefore referred to a strip of coast that comprised more than the Palembang area, and the cartographers of the Mao K'un map conformed with court dogma by including two Old Channels on their map. But they faltered in one respect. The earliest version of the map, published before the end of the Ming dynasty in 1644 and represented by the specimen in the Columbia University library, does not enclose the northwestern Old Channel in a rectangle.¹²³ The Japanese edition of 1664, represented by the Olin library specimen, does so.¹²⁴ Yet all specimens of the map enclose in rectangles the names of countries such as "Champa," "Cambodia," and "Aru" in order to distinguish the names of political units from names associated with physical geography such as gulfs or islands. The northwestern Old Channel was, in the eyes of the Ming court, the new name of the kingdom of San-fo-ch'i and therefore should have been enclosed in a rectangle. Ugai Nobuyuki, who edited the 1664 edition in Japan, seems to have made a diligent study of at least this part of the map and took the trouble to add the rectangle.¹²⁵ Another instance of his diligence is his correction of the characters Pai-pi, appearing on the Ming edition of the map, to read as Chan-pi (Jambi), thereby anticipating Hsiang Ta's comment in his 1961 publication of the map that Pai-pi was an error for Chan-pi.¹²⁶

Where was the northwestern Old Channel? A late Ming text helps to answer the question. Ch'ên Jên-hsi's *Huang Ming shih-fa lu* completed

120. *Ibid.*, p. 58.

121. Mills (ed.), *Ma Huan*, p. 74.

122. Contained in his *Ying-yai Shêng-lan*, translated by Mills; see note 7.

123. The rectangle is also omitted in the specimen in the Library of Congress and in the specimens published by Phillips and Hsiang Ta.

124. Chou Yü-sên's specimen does likewise.

125. See note 52.

126. Hsiang Ta, *Chêng Ho hang-hai t'u*, p. 17.

in 1630,¹²⁷ makes the following observation in its section on San-fo-ch'i: "Some say that the king's name was Jambi. Today the place where the king reigned is called Jambi country."¹²⁸ The *Sung-shih* had already stated that the title of the San-fo-ch'i king was "Jambi,"¹²⁹ and there need be no doubt that the center sacked by the Javanese in 1377 was also known as "Jambi." The Old Channel to the north of Palembang on the Olin Library's example of the Mao K'un map is plausibly close to the gulf called "Jambi" on the 1664 edition of the map. Yet the *Shun-fêng hsiang-sung* ignores the navigational approach to the Jambi channel. Perhaps the effects of the Javanese attack in 1377 were so lasting that the Jambi harbor ceased for a long time to have any commercial or political importance and was unworthy of the Ming fleet's attention.¹³⁰ One day archaeologists will be able to comment on this possibility in the light of excavations in the Jambi region.

We shall now return to the different waterways into the Palembang gulf. When was Wang Ta-yüan's Old Channel, later known as the eastern channel and somewhere across the Musi river south of Air Bersih, first abandoned to the mud, with the port known to Wang's informants never to be reoccupied when Malay or Javanese authority was restored in the gulf towards the end of the fifteenth century or early in the sixteenth?

Artifacts cannot be expected to indicate even an approximate date for the beginning of the Air Bersih settlement. A number of Sung artifacts have been recovered, but the report of the excavations suggests that these may have been "heirlooms" and in the possession of their owners before the occupation of Air Bersih began. Sung ware could still have been used in trade during early Ming times. Indeed, kilns in early Ming China continued to manufacture celadon.¹³¹

One possibility for the origins of Air Bersih is that, during the fourteenth century but later than 1330, Chinese traders were drifting away from the port served by the freshwater channel because of its increasing silting. Wang Ta-yüan's account of the Old Channel coincided with the last phase in the fairway's commercial history.

Nevertheless, the sailing directions of the early fifteenth century do not reveal that the eastern channel was entirely unnavigable. Instead, they show that the middle estuary was the correct route, the reason being, as we have seen, that it led to the Air Bersih settlement. Air Bersih may have been founded because of circumstances that had nothing to do with the physical state of the eastern channel.

I suggest that the settlement began in the second half of the fourteenth century as a result of a rather sudden and considerable exodus of angry Chinese from southern China in defiance of the overseas trading prohibitions issued by the first Ming emperor (1368-98).¹³²

127. On this text see Franke, *An Introduction to the Sources of Ming History*, p. 6. The text exemplifies "a new and more critical attitude" among historians.

128. Ch'ên Jên-hsi, *Huang Ming*, p. 2162.

129. Groeneveldt, *Notes on the Malay Archipelago*, p. 63.

130. Jambi is omitted from the list of prominent Sumatran toponyms in the texts of fifteenth century Arab navigators; Tibbetts, *Arab Navigation*, p. 395.

131. Wolters, *Fall of Śrīvijaya*, p. 188.

132. The earlier port would have contained Chinese traders, though not necessarily

Ma Huan says that the Chinese inhabitants of the Old Channel "fled" there, and, in connection with Ch'ên Tsu-i, he says that this pirate's gang had "fled" with their families in the 1368-98 period.¹³³ The *Ming shih-lu* describes Liang Tao-ming, the first headman in the Old Channel settlement (Air Bersih), as a Cantonese who "escaped" with his family and lived there for many years. People from Kuangtung and Fukien followed him to the number of several thousands.¹³⁴ The terms "fled" and "escaped" were used by Ma Huan, a court official, and in the court records in the sense that these people had left China illegally. Only in the context of the first Ming emperor's policy is the expression explicable; the emperor's predecessors had never denied their subjects' right to travel overseas. The statement that Liang Tao-ming had lived in the Old Channel "for many years" need not mean that he arrived there before the beginning of the first Ming reign. According to another text, he had originally traded in Java,¹³⁵ and he may have come to Palembang not many years before he became headman in the last decade of the fourteenth century.

Edicts to prevent Chinese from traveling overseas were frequently issued after 1377, when the emperor, humiliated by the unfortunate results of the San-fo-ch'i investiture, turned his back on Southeast Asia.¹³⁶ Chinese who insisted on trading overseas as earlier generations of them had been doing in later Sung and in Yüan times were now castigated by their government as pirates and rebels, and severe punishment awaited them if they were captured or dared to return to China. In these circumstances, the Air Bersih settlement could have begun and become known as a safe haven for enterprising Chinese, compelled to live abroad if they wanted to trade in Southeast Asia, though it is also possible that the refugees had originally settled near the earlier port on the southern shore of the gulf and moved into Air Bersih only after the Javanese destruction of the earlier centers in the 1390s; all that is known for certain is that they were in Air Bersih during the first four decades of the fifteenth century. However, as soon as they had established themselves somewhere in the Palembang area, their example would have attracted other refugees from China who wanted to prosper under the leadership of trusted fellow villagers, known to be doing well abroad. In some cases wives would have been smuggled out of China; in other cases the settlers would have married Malays.¹³⁷ The refugee population probably grew substantially in the 1399-1402 period, when not only had Malay authority temporarily disappeared but political instability in China between the reigns of the first Ming

many permanent Chinese residents. Chou Ta-kuan met overseas Chinese in Angkor at the end of the thirteenth century, and the Mongol conquest of southern China may have driven refugees to other places besides Vietnam. For the refugees to Vietnam, see the *Đại Việt sử ký toàn thư* (2 vols.; Hà Nội: Nhà xuất bản Khoa học Xã hội, 1967), II, pp. 39-40 (under the date of 1274).

133. Mills (ed.), *Ma Huan*, pp. 98-99. According to the *Shu-yü chou-tzũ lu*, ch. 8, 17b, the gang had more than five thousand men in it.

134. *Ming shih-lu*, ch. 38, 4b.

135. T'an Ch'ien, *Kuo-ch'üeh* (Peking: Ku-chi ch'u-p'an shê kuan, 1958), p. 948, in respect of 1405. This text was written about 1653.

136. See Wolters, *Fall of Śrīvijaya*, chap. 5, for a brief account of the prohibition policy. Edicts were issued in 1381, 1390, 1391, 1394, and 1397.

137. Are the settlers' skeletons likely to survive in the Palembang soil? Would Chinese graves have been protected after the Chinese abandoned the settlement?

emperor and the Yung-lo emperor resulted in a suspension of the enforcement of edicts against overseas trading. Thereafter, and especially after the death of the Yung-lo emperor in 1424, the Air Bersih traders had ready access to Chinese manufactured goods, and quantities of porcelain reached them for resale or storage in Air Bersih.

I have suggested two possible explanations of the origins of Air Bersih, preferring the second one that attributes the settlement to special circumstances affecting Chinese traders in the second half of the fourteenth century. What would have been the consequence of the refugees' arrival for the Malay rulers in the years before the Javanese attack in the 1390s? The royal residence need not have been very close to Wang's port or to Air Bersih. Bubad, Majapahit's port, was at some distance from the royal city of Majapahit. The 1974 report leads us to suppose that the Malay center was not on the northern shore of the Musi, though the *Sějarah Mělayu* states that the river of the city of Palembang was the Muara Tatang.¹³⁸ The confluence of the Tatang and Musi is on the northern shore of the Musi, not far west of modern Palembang city. According to the 1974 report, "surface finds everywhere west of Palembang tend to be sparse,"¹³⁹ and I would be presumptuous if I were to suggest that excavations in the neighborhood of the Tatang river and the Kedukan river, slightly further east and also on the northern shore of the Musi, might yield artifacts. The effort, however, would settle once and for all the credibility of this detail in the *Sějarah Mělayu*.

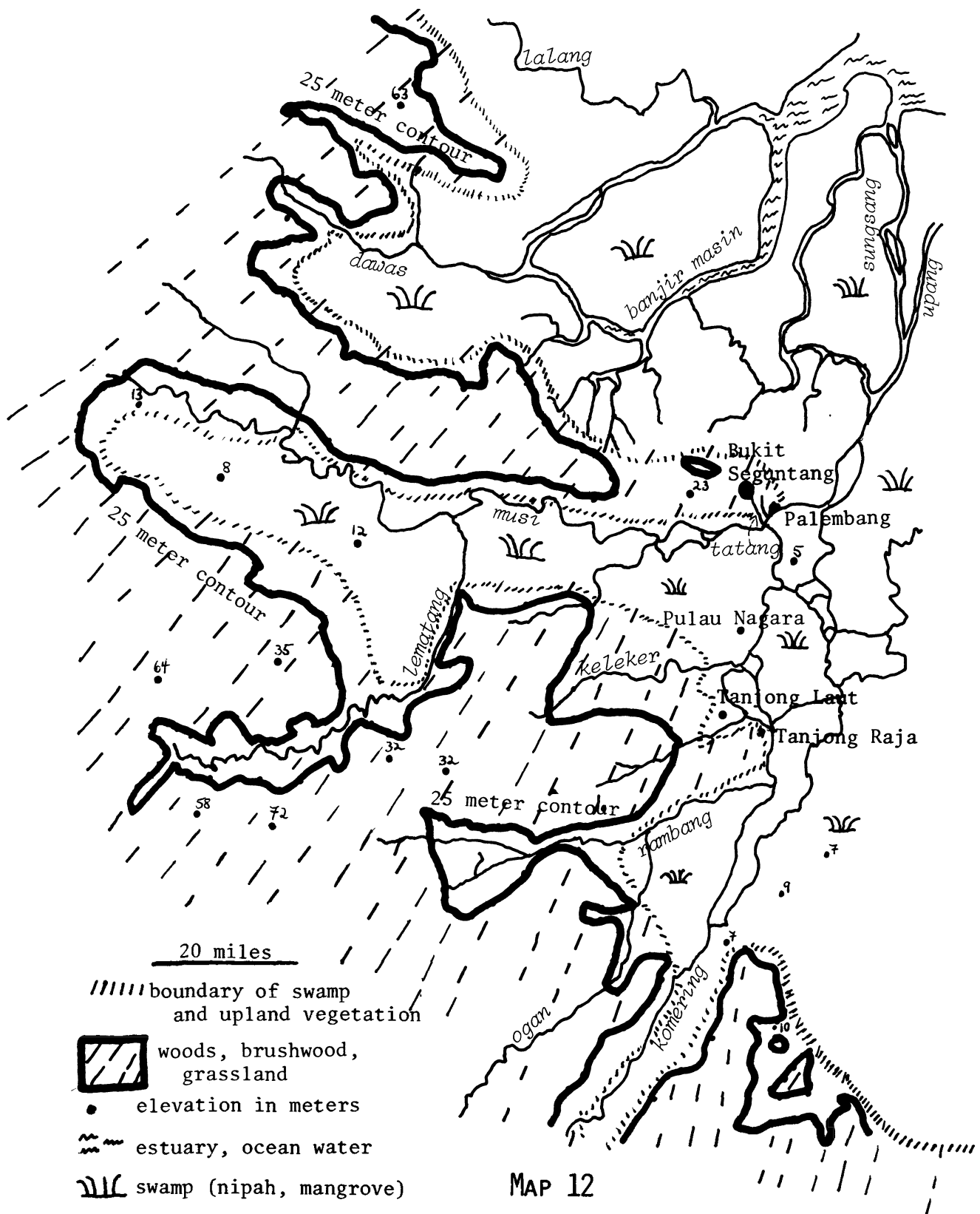
The fourteenth century royal center remains as elusive as the pre-Air Bersih commercial center. Yet we can believe that the Malay ruler, while not shifting his place of residence, welcomed the new settlement because he knew that he had access to additional revenue from the expanding commercial population. Some of his new wealth may even have found its way to the offshore islands south of the Malay Peninsula and help to explain why, according to Tomé Pires, the founder of Malacca realized "how great was his power in the neighbouring islands," a circumstance that encouraged him to defy his Javanese overlord after Hayam Wuruk's death.¹⁴⁰

I have suggested that Air Bersih was founded by Chinese refugees no earlier than the second half of the fourteenth century and that it became the only Chinese settlement in the area during the last decade of that century. Nevertheless, at the moment all that is known for certain is that the Musi estuary had become the correct navigational approach to the Palembang area by the first decades of the fifteenth century. The first phase in Air Bersih's history will not be defined more accurately until the discovery of debris belonging to the final phase in the history of the port that preceded Air Bersih's port on the Musi. And so we must now consider possibilities for finding the earlier port and its adjacent royal, sacral, and subsistence centers.

138. C. C. Brown (ed.), "Sějarah Mělayu," *JMBRAS*, XXV, 2-3 (1952), p. 24. Sri Tri Buana, according to the same text, sailed to Bentan from the "Kuala Palembang." I accept the accuracy of Pires' account of the violent attack by Javanese on the Palembang ruler's territory in the period which I reconstruct as the 1390s, and I would suppose that some archaeological evidence of the event exists somewhere in the Palembang region.

139. *Archaeological Research in Sumatra 1974*, p. 10.

140. Cortesão (ed.), *Suma Oriental*, II, p. 231.



MAP 12

I am well aware of the hazards of the undertaking and of my vulnerability to the charge that I am unfamiliar with the terrain and its scope for useful archaeological research.¹⁴¹ The hazards are caused by the great changes, often alluded to in this study, occurring on the coastline of southeastern Sumatra during historical times as the result of continuous growth in the alluvial belt. I have before me van Bemmelen's reconstruction of the coastline early in the Christian era, and it shows that the modern city of Palembang lies near the eastern tip of a peninsula, south of which is delineated a twenty-five mile wide gulf with its southern shore in the shape of another peninsula extending to the modern site of Tanjong Raja.¹⁴² All that remains today of this gulf is a few lakes and the Musi river, with its tributaries; to the east and northeast of the gulf are many miles of silt before the coastline is reached. In this terrain Wang Ta-yüan's port may have begun its career when an earlier port had been abandoned because it was no longer usable.

Another hazard is that the rivers were changing their direction over the centuries. The sinuous courses of the rivers today are the result of prolonged sedimentation. Moreover, the rate of sedimentation probably varied at different parts of the coast in different times and even at the same part of the coast. The general consequence would have been not only a coastline that was changing at an irregular pace but also the gradual appearance of islands off the coast that were later enlarged and surrounded by new tributaries of the existing rivers to the extent that they lost their insular identity. Indeed, the siting of ports in this terrain may seem surprising. Nevertheless, the narrowing riverine estuaries on the southern shore provided shelter and protection for ships. The stable northern shore on the Palembang peninsula, on the other hand, may in earlier times have been too exposed to the sea to be suitable for mooring purposes. I shall suggest below what I believe was the role of the Palembang peninsula in the lives of the gulf's inhabitants.

These are some of the hazards in attempting to discover the earlier port by means of library research. Obviously no more than possibilities can be suggested, and two will be noted. The first is based on the evidence in the Chinese texts. The other can be evaluated only when the terrain is explored on the spot.

We have seen that the texts indicate that the route to the earlier port lay somewhere to the south of the Musi channel. We can therefore suppose that the freshwater fairway, known as the eastern channel in the Mao K'un map, entered the sea somewhere southeast or southwest of the Musi channel. Bosch foresaw the possibility that Śrīvijaya lay in the swampy terrain south of modern Palembang and across the Musi river.¹⁴³

141. I have benefited from discussions with Mr. John N. Miksic on the problems of interpreting textual evidence in the light of geomorphological considerations.

142. Van Bemmelen, *The Geology of Indonesia*, II, pp. 12-13. See Map 12 opposite that Mr. Miksic kindly prepared for me. His sketch is based on altitudes above sea level and corresponds closely to van Bemmelen's map.

143. F. D. K. Bosch, "Verslag van een Reis door Sumatra," *Oudheidkundig Verslag uitgegeven door het Koninklijk Bataviaasch Genootschap van Kunsten en Wetenschappen*, 1930, p. 156. He was commenting on the recent dredging up of three bronze Buddhist statues from the bed of the Komering river not far south of its junction with the Musi.

A number of possibilities arises if one examines the topographical relief, shown on modern maps, of the area once occupied by the gulf of Palembang¹⁴⁴ (now largely a gulf of the mud that may long ago have given its name to the Palembang region).¹⁴⁵ The first question concerns the factors that determined the rate and direction of the sedimentation process.¹⁴⁶ Probably the sediment was originally carried westward by the Musi, Ogan, and Komering rivers to be deposited in the calm waters of a wide gulf. As the sediment accumulated, the southern shore at the western end of the gulf probably began to advance eastwards, eventually bringing into being the lower reaches of the Ogan and Komering. This development, involving the silting of the western end of the gulf, preceded the process of sedimentation further east and north. With the narrowing of the gulf, eventually to assume the width of the Musi river, the Ogan and Komering rivers became less stable in their lower reaches, and their floodwater sought to reach the sea to the east, by means of new rivulets through the swamps and bog on what remained of the gulf's southern shore. These rivulets also deposited mud, thus contributing to the extension of the alluvial belt that today separates the Musi river at Palembang city from the sea to the north and north-east.

On modern maps a rim of relatively high land, about fifteen meters above sea level, is shown curving along the Palembang peninsula, through the area to the west of the alluvial belt, and along the southern peninsula where Tanjong Raja stands today. Patches of such land can also be found to the west of the Ogan river,¹⁴⁷ whose lower reaches were described in 1822 as "the thousand islands."¹⁴⁸ In 1822, the southern bank of the Musi was said to be "notably higher" than the

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144. My modern map is Indonesia 1:250,000. Series T 503 (first edition). Published by U.S. Army Map Service from information compiled in 1955 from various sources.
145. John Crawford believed that the name Palembang, or "more correctly Palimbang," was "derived from the Javanese verb 'limbang,' meaning 'to drain off or decant a fluid . . . which is performed in wicker baskets'; John Crawford, A Descriptive Dictionary of the Indian Islands and Adjacent Countries (London: Bradbury and Evans, 1856), p. 322. "Lembang" or "limbang," however, is also the Malay word for a low-lying swamp, broken land, mud, or puddle; R. J. Wilkinson, A Malay-English Dictionary (Singapore: Kelly and Walsh, 1903), p. 607. In his 1932 dictionary, Wilkinson wrote: "The name Palembang is explained (Mal. Annals 18) as Pĕrlimbang or Paralimbang (lowlands), Mahameru being the Highlands." Indonesian and Malay place names often begin with pa- or pe- without any ascertainable root meaning. If any physical reality is reflected in the name Palembang, the reality is surely the mud that has always measured the passing of time in the Palembang gulf.
146. Professor Verstappen believes that only a narrow alluvial plain existed east of the Palembang peninsula in early historical times; Verstappen, A Geomorphological Reconnaissance of Sumatra, p. 56. The ancient history of this region is complicated by an additional phenomenon. Tectonic movements, beginning in the Holocene age (the last ten thousands years of Earth history), affected the level of parts of the peneplain that formed the northern and southern shores of the gulf. As a result some parts of the surface between the shores sank and other parts were raised. The gulf, with its disturbed bed, then gradually filled up as a result of riverine sedimentation; ibid., pp. 52-56.
147. One patch of higher land about fifteen miles up the Ogan and to its west is called Pulau Nagara. On the map at the end of Verstappen's A Geomorphological Reconnaissance of Sumatra the rim of higher land is described as "the peneplain of Eastern Sumatra." The map gives a vivid impression of the location of the gulf of Palembang.
148. De Heldhaftige Bevreiding van Palembang, p. 16.

adjacent areas.¹⁴⁹ By the seventeenth century at the latest, the gulf had narrowed to the extent of being the Musi river, on whose southern shore the Dutch factory was built opposite modern Palembang city. The early fourteenth century port on the southern shore of the gulf may not have been very far south of the future Air Bersih port, and its inhabitants, probably Chinese, could conveniently move into Air Bersih to reinforce the settlement. Similarly, if, as I believe, the inhabitants of Air Bersih eventually moved to the southern shore of the Musi when the Malay and Javanese Geding Suro settlement was established, Chinese would again have settled on the southern shore of the by then very narrow gulf.

I have suggested some topographical possibilities to be borne in mind in searching for the pre-Air Bersih settlement. A further possibility lies in what is known of the nutritious quality of the soils washed down from the volcanic mountains in the interior. This type of soil permits the creation of *lebak*, low flooded land where rice can be grown. The Ogan and the Lematang are today considered to supply the best volcanic soil in the region and to promote the most fertile drainage and highest densities of population.¹⁵⁰ The confluence of the Lematang and Musi is about forty miles to the west of Palembang city. The Komerang basin is less productive. Padi grows about twenty-five miles south of the Ogan-Musi confluence in the Tanjong Raja area, the area that happens to be the most eastern tip of the peninsula forming the southern shore of the gulf shown on van Bemmelen's map. The presence of relatively fertile land south of modern Palembang suggests that the stereotype of the "Palembang" population as consisting only of fishermen, living on rafts, should be modified to allow for the possibility that agriculture was practiced in the neighborhood and provided the local Malay government with a subsistence center.¹⁵¹ The fertility of the Ogan basin suggests a further possibility. The population, supported by the nutritious soil, would not have been idle in felling trees, thereby accelerating the rate of sedimentation. The inhabitants of the subsistence center could thus have hastened the day when Wang Ta-yüan's port lost its easy access to the sea.

I have indicated a few topographical considerations to be taken into account when a search is made for early settlement areas south of the Musi river. Attention has been called to a strip of land between the Ogan-Musi confluence in the north and a point about twenty-five miles south as an area worthy of reconnaissance. The southern limit

149. *Ibid.*, p. 15.

150. E. C. J. Mohr, The Soil of Equatorial Regions with Special Reference to the Netherlands East Indies, trans. Robert L. Pendleton (Ann Arbor: Edwards, 1944), pp. 546-551. An observer in 1843 noted that upstream the Ogan had very fertile banks, suitable for various products. The banks were quite high; W. L. de Sturler, Proeve eener Beschrijving van het Gebied van Palembang (Groningen: Oommrens, 1843), pp. 47-48. The 1974 expedition refers to investigations up the Lematang but not up the Ogan.

151. Wang Ta-yüan relates a local legend about the inhabitants of the Old Channel. "It is a common saying that if grain is planted one year the third year gold grows, meaning that the grain was changed into gold"; Rockhill, "Notes on the Relations," p. 135. Rather than explaining the legend in terms of agricultural wealth, I prefer to think of the tale of the three widows of Palembang, who saw that their padi had golden grain, leaves of silver, and stems of gold just before Sri Tri Buana's appearance on Bukit Seguntang; C. C. Brown (ed.), "Sĕjarah Mĕlayu," p. 24.

is the Air Ramban, a tributary of the Ogan. This area, which may have to be extended westwards and eastwards in the light of the results from aerial photography and soil analysis, is the zone in which to search for artifacts left on the southern coast of the Palembang gulf in the fourteenth century and earlier. The reconnaissance should not ignore the edge of the nonswamp land to the west of the Ogan and its tributaries,¹⁵² but the area that deserves special attention is the lower reaches of the Ogan. The three Buddhist statues dredged up from the Komering bed¹⁵³ lend some support to the possibility that an ancient navigational channel existed not very far south of Palembang city. The map in Barros' *Fourth Decade* and the maps of Lodewijcks and de Fer reinforce the impression that the western end of the gulf was once known to contain large islands, separated by sizeable channels. The "notably higher land" on the southern shore of the Musi, described in the Dutch account of 1822, may, as late as the fourteenth and fifteenth centuries, have been an island in the formerly combined estuaries of the Ogan and Komering rivers and may even correspond to the island shown on the Mao K'un map that separates the Old Channel from the eastern channel.

When the reconnaissance is undertaken, the first need will be to establish a sedimentation chronology, supported by tectonic analysis, as the basis for reconstructing the longitudes and latitudes in which mud was being deposited at different times in the past. Aerial photography will help to reveal color tones of the significant features on the ground and especially of beach ridges and sand bars.¹⁵⁴ Core sampling apparatus can be used to excavate specimens of different layers of deep mud, mangrove trees, and the sea bed for laboratory examination and dating. Sooner or later evidence will be detected of soil disturbance by human agencies, and gradually a map of the shifting coastline and its ancient settlement areas will disclose itself. A preliminary survey of these lines rather than a search for surface remains such as shells, sherds, or porcelain seems to be the realistic first step. The survey could also include an investigation of the origins of local place names associated with *pulau* or *talang*.¹⁵⁵ Legends in the area of these sites would always be enlightening.

The search will be arduous, but the tedium will be alleviated if representatives of the natural sciences participate. Significant evidence will then become available fairly soon. The geologists will be the first beneficiaries, but their findings will help to define the archaeologists' strategy.¹⁵⁶ And all members of the survey team will

152. There happens to be a "Pelembang" about fifteen miles up the Air Keleker, a tributary of the Ogan, though the same place is also called "Gelumbang." About five miles south of the confluence of the Keleker and Ogan is Tanjong Laut.

153. Bosch, "Verslag van een Reis door Sumatra."

154. Beach ridges have been observed at Komering Hilir and Mesuji; Tjia et al., "Coastal Accretion," p. 21. Professor Verstappen considers that Mesuji was probably once an island; Verstappen, A Geomorphological Reconnaissance of Sumatra, p. 54.

155. Talang is the local name for low plateaux and ridges between the alluvial plains in the Palembang area; *ibid.*

156. An excellent example of what can happen when historians and geologists work side by side is supplied by J. Noorduynd and H. Th. Verstappen, "Pūrṇavarman's River-works near Tugu," Bijdragen tot de Taal-, Land- en Volkenkunde, CXXVIII, 2-3 (1972), pp. 298-307. Aerial photography and geomorphological observations

be able to assist each other in learning to understand and respond to the landscape. Indeed, a major objective of the reconnaissance will be to reconstruct the scenes that were the familiar experiences of the inhabitants of earlier times in this part of Sumatra as a basis for broaching questions about their life-styles, perceptions, and folklore. In this way ancient settlement patterns will be approached empathetically as well as through material remains, which are likely always to be meager in quantity.

One particular perception may gradually dawn on the team, namely how the inhabitants of this swampy and unstable territory saw the dry land of the Palembang peninsula lying on the northern shore of the gulf. This peninsula and its extension to Bukit Batu are the only parts of the region discussed in this essay that have never in historical times been assailed by sedimentation and the erratic river flooding caused by sedimentation. The significance of the peninsula in early times is the greatest mystery of all in the region of the Palembang gulf. Although its terrain is above flood level, the northern shore of the gulf apparently did not become a settlement area before the fourteenth century.¹⁵⁷ Nevertheless, seventh century inscriptions have been found there. The archaeologists in 1974 were so confident that there was no settlement in the neighborhood of modern Palembang before the fourteenth century that they felt compelled to suggest that the inscriptions were imported from outside the region much later in time. They believed so in spite of the fact that the statuary as well as the inscriptions found on the peninsula are almost exclusively associated with the Mahāyāna and belong to a time span approximately from the seventh to the tenth century. If these items were brought to Palembang by a latter-day collector of antiquities, the collector was not interested in a random assortment of imports. And, if Geding Suro (c. 1500-c. 1700) was the earliest Indonesian settlement in the region, the presumption is that the collector of Buddhist remains was a Moslem.

An alternative and less extraordinary explanation is available if we bear in mind that the Palembang peninsula must always have been seen by the inhabitants on or near the southern shores of the gulf as immune from encroachment by flooding and the alluvial belt and also as the site of Bukit Seguntang, only about ninety feet high but the solitary hill in the gulf region. Nowhere else could they have expected the landscape never to disappear. For this reason the peninsula would have been regarded as a fixed point, providing a permanent orientation and focus for the inhabitants of the gulf and enabling every part of the region to cohere. The peninsula would therefore have become the auspiciously endowed holy center, a place for worship and Mahāyāna piety, apparently never defiled by human habitation until Air Bersih was occupied either at different times in the first Ming reign (1368-98) or immediately after the Javanese destruction of the settlements on the southern shore of the gulf in the 1390s.¹⁵⁸ The isolation of the holy

have suggested the course of a fifth century waterway that was abandoned when a new one was dug later in the same century.

157. On page 37 above I wondered whether excavations in the neighborhood of the Tatang and Kedukan rivers, west of Palembang city, would yield results. This area is close to Bukit Seguntang.
158. The expedition's report notes that three bronze statues, with "close stylistic affinities with the art of Majapahit," were found in the Air Bersih area in the early 1930s. A bronze statue was found there in the style of the ninth or tenth century; Archaeological Research in Sumatra 1974, p. 7. The "Majapahit"-

center from the nonsacral centers within the same region is by no means unusual in early Southeast Asia. Mr. E. Edwards McKinnon, in a letter to me, has noted that the Buddhist *āśrama* at Kota China in the neighborhood of Deli in northeastern Sumatra has no domestic debris in its immediate vicinity. Similarly, the religious importance of Ba Phnom in southern Cambodia is attested by inscriptions, but no trace of ancient habitation has so far been discovered.¹⁵⁹ The distribution of the functional centers that I suggest evolved in the Palembang region is even more strikingly matched in eastern Java during the period of Majapahit, when the royal city was some distance to the south of the port of Bubad on the Brantas and also some distance from the sacred Mt. Penanggungan to its southeast.¹⁶⁰

Bukit Seguntang was certainly a sacred site, where the 1974 expedition found the remains of modest-scale stūpas. The hill's sanctity is also attested to by the ancient and monumental granite Buddha image found on it;¹⁶¹ and probably also by the circumstance that in 684 a ruler of Srivijaya, representing himself as a Bodhisattva, performed a work of merit by consecrating a park at Talang Tuwo, five kilometers northwest of Bukit Seguntang.¹⁶² The domestic debris at Bukit Seguntang, however, is very sparse and is attributed to the period of Air Bersih.¹⁶³ But this debris does not prove that the Buddhist stūpas were built at the time of the Chinese settlement of Air Bersih. Perhaps the Chinese, after the disappearance of Malay rule, dared to trespass on a site long regarded by the Malays as hallowed. More likely, these domestic artifacts had been brought there before the foundation of Air Bersih by Malay worshippers for the same ceremonial reasons that fifteenth century Javanese brought porcelain to Mt. Penanggungan.¹⁶⁴

type statues do not help to establish the time of the first Chinese settlement at Air Bersih. The archaeologists defined the chronology of Air Bersih as comprising the fourteenth and fifteenth centuries, but the definition should be understood to mean no more than that the settlement existed for an unknown number of years during these two centuries. I believe that Air Bersih was a fifteenth rather than a fourteenth century site.

159. L. Malleret, *L'Archéologie du Delta du Mekong* (4 vols.; Paris: École Française d'Extrême-Orient, 1959-63), III, pt. 1, p. 453.
160. Paul Wheatley discusses "ceremonial sites," including the Dieng Plateau in Java, which did not accommodate permanent populations of any size; P. Wheatley, *The Pivot of the Four Quarters* (Edinburgh: Edinburgh University Press, 1971), p. 257.
161. Professor Boisselier, discussing a Cham stone torso of the Buddha with two covered shoulders, notes that its plaited garment and other features connect it with the tradition of the first Gupta images. He relates the Bukit Seguntang granite Buddha statue to the same tradition. The date of the Cham image may be between the fourth and sixth centuries; J. Boisselier, *La Statuaire du Champa* (Paris: École Française d'Extrême-Orient, 1963), p. 27. The Bukit Seguntang statue is certainly ancient and huge. Its granite probably came from quarries on Bangka.
162. G. Coedès, "Les Inscriptions Malaises de Çrīvijaya," *BEFEO*, XXX (1930), p. 57.
163. *Archaeological Research in Sumatra 1974*, pp. 11-12.
164. I am grateful to Professor Stanley O'Connor for calling my attention to W. F. Stutterheim, "The Exploration of Mount Penanggungan, Eastern Java," *Annual Bibliography of Indian Archaeology*, XI (1936), pp. 25-30. The sanctuaries in question are of the fifteenth century. Stutterheim suggests that a special geographical relationship existed between the city of Majapahit and this mountain.

The ceramic types in the Palembang area in the century before the foundation of Air Bersih would not be perceptibly different from those found in Air Bersih itself.

Near a house called Sarang Waty on the outskirts of Air Bersih the expedition of 1974 found a pit filled with about four hundred unbaked clay models of stūpas, on which Buddhist votive formulae were stamped. The antiquity of the script is still in doubt,¹⁶⁵ but these buried stūpas almost certainly represent a deposition at one moment in time rather than the pious deeds of a succession of pilgrims. The deposition may even have commemorated an event such as the consecration of the stone statue that was found at Sarang Waty. Indeed, the shaft containing the stūpas may be one element of several holy activities that were once undertaken at Sarang Waty.¹⁶⁶ If the stūpas were originally buried at Sarang Waty, the presumption is that the other holy remains on the Palembang peninsula were deposited and not transferred there, though not necessarily at the same time.¹⁶⁷ In every instance the pious works were undertaken by those who knew that the peninsula was protected from sedimentation and therefore, I suggest, believed to be safe from changes wrought by the passing of time. The buried stūpas are a testimony to the faith of those who had endowed the enduring land with religious quality, land immune to changes that, even within the lifetime of an individual, were always transforming the landscape on the southern shores of the gulf.¹⁶⁸

I have now examined Chinese texts of the fourteenth and fifteenth centuries to help explain the time span and artifacts of Air Bersih, the earliest settlement discovered on the Palembang peninsula by the 1974 expedition and dated not earlier than the late thirteenth century. The texts have led me to suppose that the settlement was founded by Chinese refugees not many years before the establishment of the Old Kang Pacification Office in 1407 in the charge of the Chinese headman at Air Bersih. This conclusion makes it very doubtful that the "Palembang" mentioned by Chao Ju-kua in the early thirteenth century or the prosperous port known to Wang Ta-yüan in 1330 was on the Musi river. The description of the passages into the gulf of Palembang, exposed

165. Archaeological Research in Sumatra 1974, p. 9. The language is Sanskrit and the script is "a form of pre-Nagari with perhaps a few characteristics of Jawa Kuna. The indicated palaeographic date is somewhere between the 8th and 14th Centuries."

166. I am grateful to Professor O'Connor for discussing these stūpas with me. I have been convinced by his understanding of their significance. He finds it difficult to suppose that the soft and unfired clay stūpas could have been disinterred from elsewhere and brought to Sarang Waty.

167. Professor O'Connor suggests that the script on the stūpas should be compared with some of the material from the Pejeng area in Bali and the Prambanan area in central Java, material likely to belong to the tenth century.

168. On the Malay Peninsula, Buddhist votive tablets were often deposited in not easily accessible caves on the sides of limestone hills; Stanley J. O'Connor, "Buddhist Votive Tablets and Caves in Peninsular Thailand," Art and Archaeology in Thailand (Bangkok: Fine Arts Department, 1974), pp. 67-84. Professor O'Connor asks whether the landscape spoke and was read "as a system of revelations and natural symbols." Perhaps the Palembang peninsula, an eccentric feature of the local landscape, also had its message for those who lived near or in the swamp and supplied for them what Professor O'Connor calls "a religious affirmation about reality and experience."

with some clarity in early fifteenth century geographical data, indicates that Wang's informants were still using a fairway that was becoming a silting river. Their fairway cannot be identified with the Musi. Moreover, Wang's port, or perhaps an even earlier one, had been used long enough for the Palembang gulf, or a passage into it, to be known by Chinese traders as the Old Channel. But no pre-Air Bersih settlement or port will be discovered until the geomorphology of the terrain south of the Musi is more exactly established. Only after the complex changes in the terrain over the centuries have been plotted on a map will it be possible to study the equally complex history of land-fall on the southern shore of the Palembang gulf.

My interpretation of the evidence, suggesting possibilities for further archaeological research, could not have been attempted without the stimulus provided by the Air Bersih excavations. No matter what fate may overtake my interpretation, even by way of the accidental discovery of an earlier settlement elsewhere on the Palembang peninsula, the results of the 1974 expedition are likely to remain as the most significant advance in the study of the Palembang region since Coedès restored the meaning of the term Śrīvijaya in 1918.

I have so far avoided the question of the location of the metropolitan centers of Śrīvijaya. Nothing discussed above lends support to the proposition that Śrīvijaya was ever in the Palembang region. Wang Ta-yüan distinguishes between the Old Channel and San-fo-ch'i, and Chao Ju-kua in the early thirteenth century does likewise with respect to Palembang and San-fo-ch'i. Ma Huan's equation of Palembang and San-fo-ch'i must be dismissed as unreliable evidence, even though the same equation in the *Ming-shih*, embodying the same misunderstanding in the early Ming court, was Groeneveldt's point of departure in 1876 when he identified San-fo-ch'i with Palembang.¹⁶⁹ The first Ming emperor's error has been a powerful influence on Śrīvijayan studies, for it was to Groeneveldt that Coedès turned in 1918 to propose the location of the "Śrīvijaya" that he had just recovered from the Old Malay inscriptions.

By way of a conclusion to this study, I shall discuss two itineraries that contain material on the southeastern coast of Sumatra in the eleventh and eighth centuries. Both of them refer to Śrīvijaya, and, if their contents could be accurately reconstructed, the location of the headquarters of Śrīvijaya in these centuries, though not, of course, of specific metropolitan centers, would no longer be in doubt.

Two Itineraries to Southeastern Sumatra in the Time of Śrīvijaya

By the expression "time of Śrīvijaya" I mean those centuries when the currency of the term "Śrīvijaya" is demonstrated in non-Chinese texts. The span of time in question is from the seventh century, when the dated Palembang inscriptions refer to Śrīvijaya, to the early eleventh century, when Tamil inscriptions do likewise. Straddling these centuries is the famous Ligor inscription from the isthmus of the Malay Peninsula, dated 775, which also refers to Śrīvijaya.

We shall now turn to a very different kind of Chinese evidence. The texts of the fourteenth and fifteenth centuries are based on Chinese eyewitness accounts of sailing features. The earlier texts

169. Groeneveldt, Notes on the Malay Archipelago, pp. 68-76, and especially his discussion on p. 76.

reflect information brought to China by foreigners. Instead of containing Chinese transcriptions of place names visited by Chinese or Chinese nicknames for navigational features, accompanied by fairly precise sailing directions, the records for the "time of Śrīvijaya" contain Chinese transcriptions of indigenous place names that had been filtered to Chinese ears through the medium of foreign tongues. Obviously, the conclusions drawn from this kind of evidence can be accepted only with caution. The texts of the fourteenth and fifteenth centuries provide indications that archaeologists should not ignore, but the relationship between the textual historian and the archaeologist is reversed when they study the earlier centuries. No judgment based on the earlier texts can be anything but provisional until ample archaeological verification becomes available.

The eleventh century itinerary is a detailed one, recorded at a time when frequent missions were being sent by San-fo-ch'i to China and when Tamil sources show that the term "Śrīvijaya" was still recognized by foreigners.¹⁷⁰ The itinerary is mentioned in the *Sung-shih* on the occasion of the first mission from a Cōḷa ruler of Tamil-nad to China in 1015.¹⁷¹ At first sight, the details seem suspect, since the length of time for the voyage from southern India to China is given as no less than 1150 days. On the other hand, the *Sung-shih* is not the earliest text to supply the voyage's length. Li T'ao's *Hsü tzü-chih t'ung-chien ch'ang-pien*, completed in the twelfth century, does so and also mentions Cōḷa interpreters who came with the mission.¹⁷² We can suppose that considerable care was taken by the Sung court's officials to debrief the Tamil envoys, who arrived at a time when the court happened to be interested in compiling information about its overseas "vassals."¹⁷³

The part of the itinerary that concerns us is as follows:

The ship reached Ku-la. This country contains the Ku-la mountain, and this is why it is called Ku-la. [The ship] continued its course for seventy-one days and nights and [sailed] past Ka-pa mountain, Chan-pu-lao mountain, and Chou-pao-lung mountain, and [it then] reached San-fo-ch'i country. [The ship] then sailed for eighteen days and nights and crossed the estuary of the Man mountain, passed the T'ien-chü mountain, and reached Pin-t'ou-lang mountain.¹⁷⁴

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170. Moreover, a Nepalese manuscript of this period contains the term "Śrīvijaya-pura," or "the city of Śrīvijaya"; Wolters, *Fall of Śrīvijaya*, p. 134.
 171. *Sung-shih* (Po-na edition; Shanghai: Commercial Press, 1937), ch. 489, 21b-22a. Part of the itinerary was translated by Pelliot in "Textes Chinois sur Pāṇḍuraṅga," *BEFEO*, III, 4 (1903), p. 649. Professor Nilakanta Sastri has translated Marie Jean Léon, Marquis d'Hervey-Saint-Denys' French translation of the version of the itinerary found in Ma Tuan-lin's *Wên-hsien t'ung-k'ao*; see K. A. Nilakanta Sastri (ed.), *Foreign Notices of South India from Megasthenes to Ma Huan* (Madras: University of Madras, 1939), p. 323.
 172. Li T'ao, *Hsü tzü-chih t'ung-chien ch'ang-pien* (Taipeh: Chung-kuo hsüeh-shu ming-chu series, 1961), ch. 84, 14a.
 173. Li T'ao, *Hsü tzü-chih*, ch. 84, 14a. In 1015, approval was given to the proposal to compile maps and miscellaneous details of the tributary countries of the Sung dynasty before 1015.
 174. *Sung-shih* (Po-na edition), ch. 489, 21b-22a.

Pelliot was satisfied that Ku-la (Ku¹-luo)¹⁷⁵ was on the Malay Peninsula.¹⁷⁶ San-fo-ch'i represents Śrīvijaya at a time when Cōla inscriptions mention Śrīvijaya, and the headquarters of this country were somewhere on the southeastern coast of Sumatra. Pin-t'ou-lang represents Pāṇḍuraṅga on the Cham coast of southern Vietnam.¹⁷⁷ Pāṇḍuraṅga was approached from the T'ien-chü mountain, which is a reference to Pulau Aur in the vicinity of the Tioman islands off the coast of Pahang. One of the itineraries in the *Shun-fêng hsiang-sung* was from Sunda to Pulau Tioman via the Old Channel.¹⁷⁸ Thus the Tamil mission sailed from Śrīvijaya by the well-traveled route that lay east of the Riau-Lingga archipelago into the South China Sea. The mission had just navigated the Malacca Straits and the Durian Strait to reach Śrīvijaya. The identification of Śrīvijaya's location therefore depends on the meaning of Ka-pa, Chan-pu-lao, Chou-pao-lung, and the estuary of the Man mountain.

An identification will be proposed for Chan-pu-lao (*Tsriam-pu¹q-lau*),¹⁷⁹ a toponym that Pelliot believed should be restored as Cham Pulau.¹⁸⁰ The Malays would have known the place as Pulau Cham, but the Chinese scribes' inversion need not upset the identification.¹⁸¹ Pulau Cham appears on maps as a feature on the route from the Durian Strait to southeastern Sumatra in the form of an island off the west coast of Lingga Island and in the neighborhood of what the *Eastern Archipelago Pilot* describes as "the fairly high hills" of Pulau Bakung.¹⁸² The same source says of Pulau Cham that it "has some tolerably high hills, and is steep on the eastern and southern sides."¹⁸³ The Tamils may have spotted Pulau Cham as they made their way southwards from the Durian Strait. According to Li T'ao, the Cōla ruler had been encouraged by a shipping merchant to send his mission, and his ship could have had a Malay or Arab pilot on board to steer it through the conventional passage to southeastern Sumatra.¹⁸⁴

175. I have reconstructed the sounds of these names according to the phonological system in Hugh M. Stimson, *The Jongyuan in Yunn: A Guide to Old Mandarin Pronunciation* (New Haven: Far Eastern Publications, Yale University, 1966). I am grateful for discussions with Professor John McCoy. He tells me that the ¹ is used only to distinguish nonrhyming syllables and that Ku or Ku² would be possible for Ku¹.

176. Pelliot, "Deux Itinéraires," p. 352.

177. Pelliot, "Textes Chinois sur Pāṇḍuraṅga," p. 649.

178. See the excerpt on pp. 25-26 above. The islands of Aur are shown on the upper part of the Mao K'un map as the "Western" and Eastern" Chü mountains. See Map 1 at the start of this essay. Tioman is rendered as Ti-p'an mountain; Mills (ed.), *Ma Huan*, p. 192. Map 9 shows the route through the Aur-Tioman islands taken by the French mission to Ayudhyā in Louis XIV's reign.

179. Professor McCoy informs me that the Tsr- would have sounded like Ch. The q at the end of the second syllable is a glottal stop final.

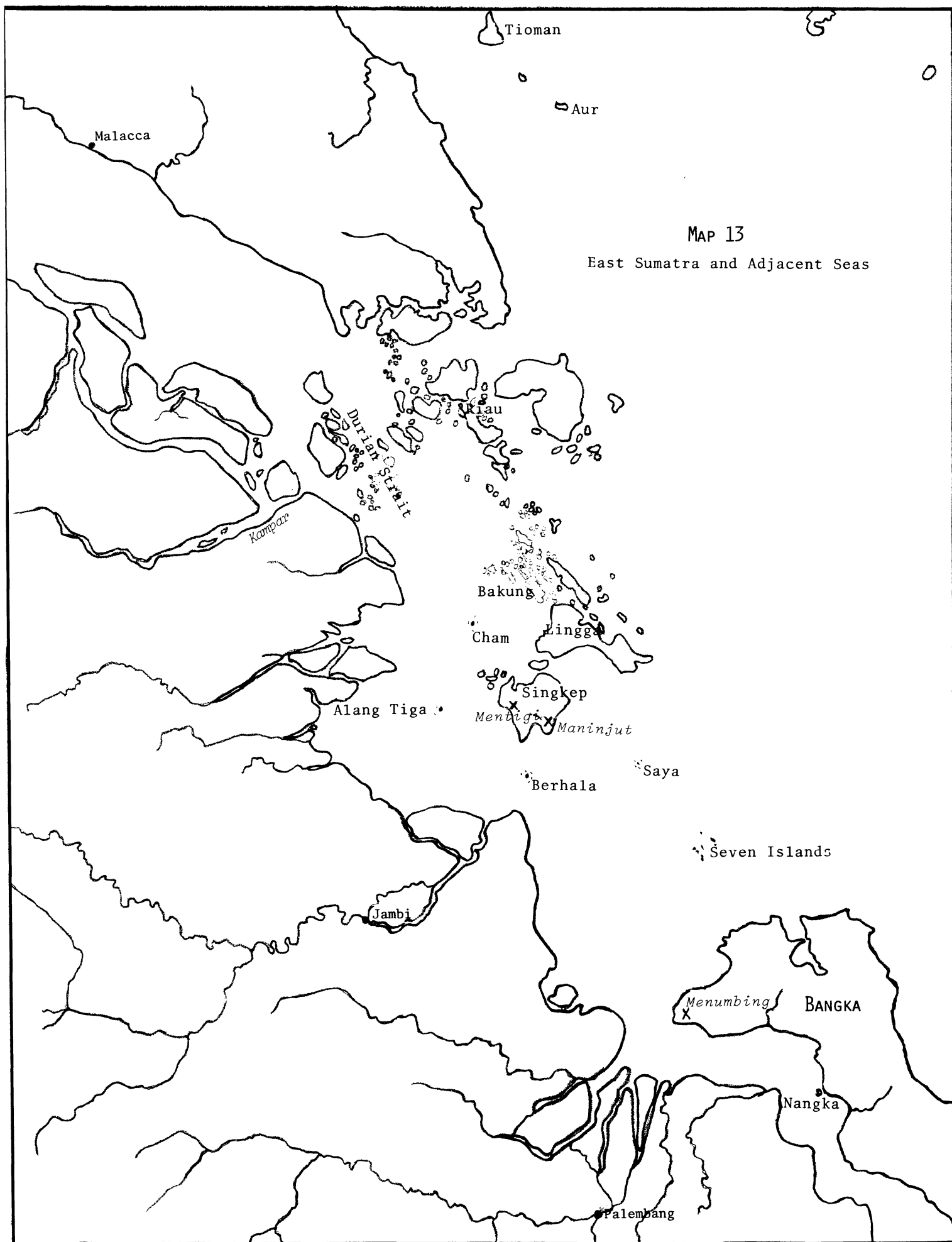
180. Pelliot, "Deux Itinéraires," p. 201.

181. For example, in Ming times the Chinese transcription of "tengah hari" was inverted; E. D. Edwards and C. C. Blagden (trans. and ed.), "A Chinese Vocabulary of Malacca Malay Words and Phrases Collected between A.D. 1403 and 1511(?)," *Bulletin of the School of Oriental and African Studies* (BSOAS), VI (1930), p. 719. Pelliot noted similar inversions in Arab sources; "Deux Itinéraires," p. 201.

182. *Eastern Archipelago Pilot*, p. 192.

183. *Ibid.* Pulau Cham is plotted on Map 13 opposite.

184. Li T'ao, *Hsü tzü-chih*, ch. 84, 11b.



Before the ship passed Pulau Cham, it had passed the Ka-pa (Ka-paq) mountain, a name that defies exact identification.¹⁸⁵ Equally mysterious is Chou-pao-lung (*Tsri-tu-pao-liorŋ*), the landmark immediately preceding Śrīvijaya.¹⁸⁶ The estuary of the Man (*Man*) mountain, crossed on the way from Śrīvijaya to Pulau Aur, is the single toponym that could supply the key to the identification of Śrīvijaya's location.

Some years ago I suggested that the Man mountain was an abbreviated form of either Menumbing or Muntok at the northwestern tip of Bangka.¹⁸⁷ I now prefer to see the toponym as a reference to the prominent Menumbing hills, a landmark mentioned several times in this essay when the accounts of Ming voyages to the Old Channel were examined.

The first point to be borne in mind in determining the location of the Man mountain is that the landmark was not spotted on the Tamil ship's voyage through the Durian Strait to San-fo-ch'i. In the eleventh century, the Sumatran coastline was considerably further to the west than it is today. And the presumption is that in those days the Man mountain was an islet or a hill on an island some distance off the east coast of Sumatra, spotted only after the ship was making its way to the South China Sea after leaving San-fo-ch'i.

The next point is that the landmark gave its name to a "water mouth" (*shui k'ou*), in the sense of a place where water emerged from a river or channel. The ship had "to cross" (*tu*) an estuary before it could sail to Pulau Aur without assistance of further landmarks. This is the only section of the itinerary where the ship is said to "cross" water; elsewhere it had "passed" (*li*) the landmarks noted in the *Sung-shih*. Apparently the ship arrived at a large stretch of water that came from a different direction than the water through which it had passed when it first left San-fo-ch'i. The ship reached a confluence of two waterways, dominated by the Man mountain which gave the confluence its name.

We shall now compare this itinerary with the early Ming ones, discussed in connection with the Old Channel. The sailing directions for the voyage from Malacca to the Old Channel do not mention the Bangka hills as a landmark.¹⁸⁸ The hills are mentioned only in respect to the voyages to the Old Channel from mainland Southeast Asia via Pulau

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185. Perhaps the word is an abbreviation of the Malay *kepala* ("head"), in the sense of being a headland. Alternatively, the original word may have been *Kampar*. *Kampar* appears in the early Ming itinerary to and from Malacca and the Old Channel; Hsiang Ta, *Liang chung*, pp. 85-86. *Kampar* is also mentioned in Linschoten's *Reys Gheschrift*, p. 137, in connection with the voyage from Malacca to Sunda.
 186. Could it be Tanjong Jabong, the southern entrance point of the Berhala Strait mentioned by Linschoten as "Tanjanbon" (*Reys Gheschrift*, p. 139)? The coastline of southeastern Sumatra between Jambi and Palembang would, however, have been very different in the eleventh century.
 187. Wolters, "A Note on the Capital of Śrīvijaya during the Eleventh Century," *Artibus Asiae*, I (1966), p. 227, note 14. Professor McCoy tells me there are and were Chinese dialects where the sound *Men-* can or could be expected.
 188. See page 25 above. On the other hand, Linschoten's account of the voyage from Malacca to Sunda mentions the Menumbing hills; Linschoten, *Reys Gheschrift*, p. 139. But changes had taken place on the Sumatran coastline between 1015 and the sixteenth century.

Saya and the Seven Islands or from Java via the Bangka Strait.¹⁸⁹ Thus, the Ming sailors en route from Sunda to mainland Southeast Asia via the Old Channel plotted a course from the Menumbing hills to the Seven Islands and Pulau Saya.¹⁹⁰ The Man mountain may be another and abbreviated reference to the Menumbing hills, alluded to by Tomé Pires in the early sixteenth century as "the islands of Monomby" which were "in front of the first land of Palembang."¹⁹¹ The toponym "Menumbing" must have existed long before the sixteenth century.

On the other hand, the Tamil ship may have left the Jambi gulf. In this case, the Menumbing hills were too far south to be seen. The ship would have made its course towards the southern shore of Singkep, the southern large island in the Lingga archipelago. If the ship sailed from Jambi, the Man mountain may be Mentigi mountain on the west coast of Singkep or, more likely, Maninjut, "an isolated hill" on the southeastern coast of the same island.¹⁹² The Man mountain can hardly have been Pulau Saya, a steep island with two peaks in the South China Sea about twenty-nine miles east of Pollux rock¹⁹³ and a landmark on the *Eastern Archipelago Pilot's* route to the east of the Lingga archipelago. Pulau Saya is known in the Ming itineraries as Man-t'ou,¹⁹⁴ but Man-t'ou is not the transcription of an indigenous name, merely a Chinese nickname that means "steamed bread" and was regarded as an appropriate name for an island of no importance except its unusual shape and usefulness as a landmark. The Tamil ship did not recognize Pulau Saya as the Man mountain.

The key evidence in the Tamil itinerary is the confluence of two waterways, known by the name of the mountain close to one of them, that the ship had to negotiate after leaving Śrīvijaya. I suggest that the single most impressive confluence that the Tamil mission would have seen off the Sumatran coast was that of the waters of the still large gulf of Palembang with the waters of the Bangka Strait, a much wider channel in the eleventh century and with an extensive and prominent coastline that distinguished it from an islet in the sea.¹⁹⁵ I know of no other waterway en route for Pulau Aur from a landfall in southeastern Sumatra that would be so readily recognized as a confluence than the northern entrance to the Bangka Strait, dominated by the Menumbing hills.¹⁹⁶

189. See pages 24 and 25 above.

190. Hsiang Ta, *Liang chung*, p. 65.

191. Cortesão (ed.), *Suma Oriental*, I, p. 157. "Monomby and Banka are all one land. . . ."

192. *Eastern Archipelago Pilot*, IV, p. 141.

193. *Ibid.*

194. Pulau Saya is called Man-t'ou in the route translated on page 24 above. For the identification of Man-t'ou with Pulau Saya, see Mills (ed.), *Ma Huan*, p. 206.

195. The Ming sailors identified the southern entrance of the Bangka Strait as "the mouth of a kang (channel)." The Strait was known as the "Bangka mountain" strait.

196. The Śrīvijayan inscription of Kota Kapur (686) was found on the west coast of Bangka, not very far south of the Menumbing hills. Pires states that the Javanese attacked Bangka as well as Palembang during the assault that drove out the founder of Malacca; Cortesão (ed.), *Suma Oriental*, II, p. 231. "They say that he [the Javanese king] killed everyone there because they were Palembang people." The Bangka Strait probably had strategic importance for the Palembang rulers in early times. I am now inclined to think that the Wên (Miwan) bay, mentioned in the third century Nan-chou i-wu chih, derived its name from the Menumbing hills; Wolters, *Early Indonesian Commerce* (Ithaca: Cornell University Press, 1967), pp. 52-53.

For these reasons, vulnerable, of course, to alternative geographical interpretations, I suggest that the port of Śrīvijaya in 1015 was on the southern shore of the Palembang gulf, facing the Bangka Strait as Wang Ta-yüan's port and the eastern channel had done. The port visited by the Tamils need not have been the port in Wang's day. Only after a search has been made for Wang's port, the last such port on the southern shore in pre-Air Bersih times, will clues become available for extending the search to identify an eleventh century port that became landlocked before the fourteenth century.

I have never believed that the capital of Śrīvijaya remained in the Palembang region throughout the eleventh century. During 1079-82 something happened that resulted in the Jambi region's becoming known to the Sung court as San-fo-ch'i, an identification that survived into the reign of the first Ming emperor (1368-98) and was responsible for the appearance of an "Old Channel" on the Mao K'un map in the neighborhood of the Jambi gulf.¹⁹⁷ Nothing is known of the background to this development, no more extraordinary than the shifting of hegemony among the princes of eastern Java. Dr. Ras believes that the changing coastline of Banjarmasin in southeastern Borneo created increasing distances between royal centers and ports and that this circumstance led to political instability.¹⁹⁸ Perhaps similar geographical conditions contributed to instability in the Palembang gulf.

The second itinerary is contained in the *Hsin T'ang-shu*'s account of the Pyu kingdom in Burma. The itinerary probably became available as a result of the Pyu mission to T'ang China about 801-802 and is therefore more or less contemporaneous with the Śrīvijayan inscription from the isthmus of the Malay Peninsula, dated 775.¹⁹⁹

The text mentions Fo-tai (B'juat-d'ai),²⁰⁰ said to be one of the Pyu dependencies.²⁰¹ B'juat-d'ai appears in the list of dependencies

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197. Wolters, "A Note on the Capital of Śrīvijaya," pp. 225-39. A Jambi mission was sent on August 2, 1079, and its envoys also came to China in 1082. On August 26 and September 19, 1079, the Sung emperor rewarded Śrīvijayan envoys with presents but did not reward the Jambi envoys; *ibid.*, p. 232. The evidence is from Li T'ao's Hsü tzü-chih t'ung-chien ch'ang-pien. Here is the first reference to Jambi in the Sung records, and it suggests that an unusual situation had developed on the Sumatran coast. The Chinese evidence of these missions does not indicate that the name or location of their rulers' capital had ever been discussed.
 198. J. J. Ras, Hikajat Bandjar, A Study in Malay Historiography (The Hague: Nijhoff, 1968), pp. 196-97.
 199. The evidence that follows is in Hsin T'ang-shu (Po-na edition; Shanghai: Commercial Press, 1936), ch. 222C, 5b-6a. The Southeast Asian toponyms in this account will repay careful study. The Pyu mission arrived at a time when foreign geography was being studied and Chia Tan's maps were circulating. Care may have been taken to extract geographical information from the Pyu envoys, and the references to places outside Burma probably reflect traders' contacts with island Southeast Asia.
 200. Transcriptions within brackets follow Bernhard Karlgren's Grammata Serica Recensa (reprint edition; Stockholm: Museum of Far Eastern Antiquities, 1964). I am again grateful to Professor McCoy for discussing the following toponyms with me.
 201. Hsin T'ang-shu, ch. 222C, 5b. For Pelliot's translation, see "Deux Itinéraires," p. 224.

immediately after Lâ-juët, or "Laut," referring to Singapore island and its immediate vicinity.²⁰² B'juat-d'âi is said to be an important shipping center, and one sailed from it to Java. Its customs were the same as those of Java. B'juat-d'âi seems to be the same place as Fo-shih (B'juat-ŋiäi), the T'ang transcription of Vijaya, or Śrīvijaya,²⁰³ and the miscellaneous information about it is consistent with the equivalence. D'âi and ŋiäi are more similar than their modern Mandarin sounds suggest. Perhaps a copyist's error has crept into the text. Alternatively, the -d'âi may be attributed to the Pyu pronunciation of "Vijaya."

B'juat-d'âi was reached by sea from a port on the Gulf of Martaban.²⁰⁴ The journey was said to take "five months," but Pelliot thought that "five days" were intended.²⁰⁵ Perhaps the text should instead be emended to read "two months." The Tamil ship took seventy-one days from Ku-la on the Malay Peninsula to reach Śrīvijaya, and a voyage of sixty days from the Gulf of Martaban to Śrīvijaya is a credible estimate.

B'juat-d'âi is described as follows:

The country has a branch of the river, and [the branch] flows 360 [li]. The king's name is Si-lji-sja-mjië-t'â [? Śrī Śamitra].²⁰⁶ There is a stream called Si-lji-b'ji-ljië-ŋiäi. The soil produces many rare aromatics. In the north there is a market, and trading ships of different countries gather there. Java is reached by crossing the sea [from B'juat-d'âi]. [Then follows an account of Java]. Its [Java's] customs are the same as those of B'juat-d'âi.²⁰⁷

Obviously, this description of B'juat-d'âi must be treated with great caution, and my observations are hypotheses that others may wish to demolish.

Two rivers are mentioned, but only one by name. This name is Si-lji-b'ji-ljië-ŋiäi. Perhaps the last syllable is a scribal error for -piwng, an almost identical character.²⁰⁸ If this is so, the river's name is remarkably close to "Śrī Palembang"; only the consonant "m" is missing in -ljië-.²⁰⁹ Again, if Chinese geographical orientations are maintained in this text, the location of the shippers' market and the port for Java should be understood to be not

202. The Hsin T'ang-shu elsewhere mentions "Laut" as Lâ-jwnt; ch. 43B, 18b. Pelliot regarded the latter transcription as a rendering of "Laut"; Pelliot, *Notes on Marco Polo*, II, pp. 766. Chia Tan's itinerary (Hsin T'ang-shu, ch. 43, 18b) shows that Laut was immediately south of the Malay Peninsula.

203. This seems to be why Professor Luce refers to "Palembang" in this context; G. H. Luce, "The Ancient Pyu," *Journal of the Burma Research Society*, XXVIII, 3 (1937), p. 250. Also see Brian E. Colless, "Walaing and the Sailendras of Java," *Journal of the Oriental Society of Australia*, VII, 1-2 (1970), p. 16.

204. For the location of Mo-ti-p'o, where the voyage begins, see Pelliot, "Deux Itinéraires," p. 224.

205. *Ibid.*

206. This is Pelliot's suggestion.

207. *Hsin T'ang-shu*, ch. 222C, 6a.

208. The characters for -ŋiäi and -piwng are given in the glossary at the end of the essay.

209. Professor McCoy informs me that there were Chinese dialects with homorganic nasals preceding initial stops; m can be expected before the initial p in -piwng. A nasal should, however, precede the -b'ji.

to the "north" but to the "east."²¹⁰ The text omits to identify the center "south" (= west) of the port. Perhaps the port was to the east of the ruler's residence, known as B'iat-d'ai (= Vijaya).

If we were to accept these observations on the text, we would then have an eighth-century description of the gulf of Palembang. The unnamed "branch of a river" would be the Musi or a branch of the "Palembang river" that entered the southern shore of the gulf and derived its name from the muddy terrain. The port would also have been on the southern shore of the gulf, with the ruler's center a little way to the west. The situation would resemble a thirteenth-century Arab description of the kingdom of the Mahārāja of Śrīvijaya, borrowed from an earlier source:

The town [of the Mahārāja] is situated on the western side [of the largest of the islands in the archipelago]. . . . To the east of the town is found an estuary of a river that flows from the hills in the north.²¹¹

But I acknowledge that I am now on textual ground as unstable as the terrain of the gulf itself. The Tamils in 1015 may well have sailed to Palembang, but the Pyu itinerary could have led to any place on the southeastern coast of Sumatra. My intention is only to remind others that this text exists. I shall show similar forbearance by not mentioning the most famous of all the Śrīvijayan itineraries, written by the Buddhist pilgrim I-ching in the second half of the seventh century. I am aware of a persistent concern, encouraged by I-ching's information, to attribute the origins of Śrīvijaya to the enterprise of a ruler on the Malay Peninsula,²¹² an explanation that perplexes me because I do not easily understand how a prince, emerging from a different ecological environment and in a Mon or Khmer cultural context, would have been able to generate sufficient support on the Sumatran landfalls to create an enduring polity. A more promising immediate objective for the study of the origins of Śrīvijaya is a reassessment of the significance of the cluster of seventh century Old Malay inscriptions, to establish more confidently whether the Palembang region was the Mahārāja's home base or territory that he had recently conquered. In particular, what is the significance of the master oath on the Telaga Batu inscription?²¹³ Would so important an oath have been administered at the ruler's center or in recently acquired territory?

210. For example, Chia Tan's account of the voyage through the Straits of Malacca, written about 800, shows that the voyage from north to south was regarded as being in a western direction; Hsin T'ang-shu, ch. 43B, 18b. The same orientation is maintained in the Mao K'un map with respect to the eastern and western channels.

211. G. Ferrand, "L'Empire Sumatranais de Śrīvijaya," *Journal Asiatique*, 11th series, XX (1922), pp. 70-71, quoting Ibn Sa'id. On Ibn Sa'id's status as an original writer, see G. R. Tibbetts, "The Malay Peninsula as Known to the Arab Geographers," *Malay Journal of Tropical Geography*, IX (1956), p. 23. Ibn Sa'id is placed in a group of writers "that includes some of the more important later geographers, very few of whom show any originality."

212. The most recent and very enthusiastic defense of the origins of Śrīvijaya in what is today the Thai isthmus is by M. C. Chand Chirayu Rajani, "Background to the Sri Vijaya Story--Part I," *Journal of the Siam Society*, LXII, 1 (1974), pp. 174-211.

213. J. G. de Casparis, *Prasasti Indonesia II* (Bandung: Masa Baru, 1956), pp. 15-46.

But I have another reason for being reluctant to discuss the earlier Chinese texts that purport to throw light on the historical geography of Sumatra. The recent opening phase in the archaeological exploration of the Palembang region now encourages me to hope that the first decades in the second century after Groeneveldt's publication in 1876 of his *Notes on the Malay Archipelago* will be accompanied by growing recognition that the study of the historical geography of the Sumatran landfalls must henceforth depend on the progress of excavation. Archaeologists are sometimes led by surface remains to dig for earlier artifacts, but the student of Chinese texts must henceforth remain at ease only when he is working in periods, inevitably later rather than earlier ones, for which his evidence is reasonably abundant and less ambiguous. For the earlier periods he must be guided by what is found in the ground.

But, above all else, I hope that in the coming years those who study ancient Sumatra will discuss new and more interesting topics than the geographical puzzles they inherited from earlier generations of textual historians, including myself. For example, in the present study I have been dealing with an environment of mud, and yet I have been unable to address myself satisfactorily to the matter that has come to preoccupy me. How did these people think about themselves in an environment where no center could ever expect to be permanently in the right place except the peninsula on which Bukit Seguntang stood? This question rather than the location of Śrīvijaya now seems to me to represent the real mystery of the gulf of Palembang. Perhaps my question is an unreal one. I hope, however, that a new level of enquiry will evolve with its focus on understanding the nature of early Malay civilization. Here is a field open not only to archaeologists. The tools of anthropology, art history, and literature are all relevant in broaching the questions that now need to be asked in order to throw light on how the people who inhabited the Sumatran landfalls organized their society and their ideas. This topic is surely more worthwhile than speculations about where each group of them lived or measurements of their degree of participation in foreign trade.

Appendix A

Ugai Nobuyuki (Ugai Sekisai)

Ugai Nobuyuki was a samurai born in Edo (Tokyo) in 1615 and later trained in the Confucian classics at Kyoto. In his colophon at the end of the *Wu-pei chih* he states that he was in retreat at Rakuyō ("Loyang"), the ancient Chinese capital with which Kyoto was often compared. From 1646 to 1660 he served the daimyo of Aoyama of the Amagasaki-han. He retired in 1660 and spent his remaining years in Kyoto, where he lectured on Chinese literature, supplied Chinese texts with guiding marks, composed poetry, and wrote a history of the struggle between the Ming and Ch'ing in China. I do not know how a copy of the *Wu-pei chih* came into his possession, but he must have had reasonably ample access to Chinese sources to be able to write his history. He knew Ch'ên Yüan-yün, a porcelain-maker from Hangchou who had fled from China in 1638 to avoid the disturbances that occurred as the Ming dynasty was collapsing. Ugai Nobuyuki died in 1664.²¹⁴

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214. See *Dai Nihon Jinmei Jisho* (5 vols., revised edition; Tokyo: Dai Nihon Jinmei Jisho Kankōkai, 1937), I, p. 347, and III, p. 1651; and *Nihon Rekishi Daijiten* (22 vols.; Tokyo: Kawade Shobō Shinsha, 1956-61), II, p. 163.

Appendix B

Linschoten's Description of the Palembang Coast, Based on Portuguese Information

To proceed from the island Pulau Veralla [Berhala] to the Strait of Palimbon, one sails southeast on a course where the mud is always at a depth of seven fathoms. On this course one will begin to see the peak called Monte de Manopijn that comes directly into sight on Banca island. When this peak appears, one should have a glimpse of the coast of Samatra by reason of its inlets (*inwijcken*). When one takes this course to the aforesaid peak, one changes course at one and a half miles²¹⁵ from the peak in order to proceed to the coast of Samatra, with the peak lying to the northeast, and one must be wary on account of a great reef that lies a mile off the peak.²¹⁶ When the peak of Manopijn lies off the side of the ship, one is exactly opposite the mouths or inlets (called As bocas de Palimbon) on the coast of Samatra. A mile from the above mentioned hook of Palimbon²¹⁷ there is a narrow and thin strip of land. On the southern side of this point many shoals extend a mile out to sea from the reef, and they always lie under the water, and one must be again warned of it. After passing it by one and a half to two miles, one is in deeper water and not threatened by the reef. Lack of much depth would cause one to touch bottom, which is what happened to a ship that was sailing on this side near the island of Banca at fifteen fathoms' depth. The ship struck its rudder on the rocks. One should also be alert in approaching close to the land called As bocas de Palimbon, or the mouths of Palimbon, because there is a great deal of shallow water and sand. Always keep a sounding lead in one's hand and do not proceed under five and a half fathoms to the land of the mouths or inlets so that one sails past it seawards at more than eight fathoms. When one arrives, one is again immediately in shallower water, so it is said.

When one makes one's way from the Manopijn hill (which stands on Banca island) to the mouths or inlets of Palimbon (which lie on the other side of Samatra), one makes one's way from the northeast to the south-southwest in a crossing of five miles. From here the Strait (called) Palimbon begins. The Strait extends to the southeast, sometimes stretching to the west and other times from the south where the Strait is not so wide. When the Manopijn mountain has been left behind by two miles, the course should be set towards the first mouth or inlet of Palimbon, with the sounding lead in one's hand, keeping out at sea by one mile in order to reach water of five and a half fathoms so that the land adjacent to the mouths or inlets is not closer, for the latter are all shallow and sand. When one is warned that one is under five and a half fathoms of water, do not proceed. And on the Banca side one should not proceed with more than eight fathoms. Sailing on a course with these fathoms for one great mile, one passes the last mouth of Palimbon existing in this country, thereby proceeding to the land of Samatra up to half a mile away. A mile further the land reveals

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- 215. A Portuguese mile in the sixteenth century has been estimated as 6.834 kilometers or $4\frac{1}{4}$ English miles; see Warnsinck in Linschoten, Reys Gheschrift, pp. LXIV-LXV.
 - 216. Warnsinck identifies the reef with Karang Haji, known to the Ming sailors as "sunken rock" islet.
 - 217. Warnsinck points out that this is a mistake for the hoof of Bangka (Tanjong Kelian).

a point ahead.²¹⁸ After reaching this point, one sees ahead another point lying four miles from the first point, and then one proceeds on a course east-southeast and west-northwest.²¹⁹

218. Warnsinck identifies this point with the Fourth Point. See pp. 28, 30 above.

219. Linschoten, Reys Gheschrift, pp. 139-40.

Glossary of Chinese Characters

Chan-pi 占必	Lang-ka 郎家
Chan-pu-lao 占不牢	lao-ku 老古
chih 至	Man 蠻
Chiu Kang (Old Channel) 舊港	Man-t'ou 饅頭
chou (settlement) 州	Niu-t'ui-ch'in 牛腿琴
chou (island) 洲	níwāi 芮
Chou-pao-lung 舟寶龍	Pa-lin-p'ing 巴林憑
Chü Kang 巨港	Pai-pi 白必
Fo-shih 佛逝	Pau-lin-pang 寶林邦
Fo-tai 佛代	piwng 芮
Hsi Kang (Western Channel) 西港	P'o-lin-pang 浮淋邦
Ka-pa 加八	Pu-lien-pa 不憐八
kang 港	shui-k'ou 水口
kêng 更	Si-lji-b'ji-ljie-níwāi 思利毗離芮
Ku-la 古羅	Si-lji-sia-mjie-t'â 思利些彌他
k'un-hsin 崑崙	tan kang (freshwater channel) 淡港
k'un-shên 坤身	Tung Kang (Eastern Channel) 東港
Lâ-juët 羅聿	tu 度
Lâ-jiwot 羅越	Wên 文